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THE BACKWOODS
OF ONTARIO,
AND
THE PRAIRIES
OF THE
NORTH-WEST.

By W. F. MUNRO,
(Over Twenty Years a Resident in Canada.)

LONDON: SIMPKIN, MARSHALL, & CO.
MANCHESTER: JOHN HEYWOOD.
GLASGOW AND EDINBURGH: JOHN MENZIES & CO.
1881.

PRICE ONE SHILLING.

Of the first part of this work in its original form published in Toronto under the name of "Backwoods Life," the following opinions were expressed:—

"Nothing I have ever read presents backwoods life more vividly and truthfully."

WILLIAM ORMISTON, D.D.

"To their positive literary merit, they add the other great recommendation, in my eyes, of neither exaggerating the inducements nor the obstacles in the Canadian settler's way."

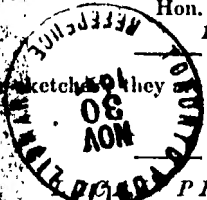
THOS. D'ARCY M'GEE.

"They present in a simple form a true picture of early settlement and backwoods life, and will be a valuable manual and instructor to the emigrant."

Hon. W. P. HOWLAND,
Ex-Lieutenant-Governor, Ontario.

"I like your sketches. They are well written, and true to the life."

Hon. GEORGE BROWN.



PRESS.

"This is a neatly got up brochure of some 80 pages, which, in a lively, interesting way, gives a good idea of life in a Canadian settlement in the backwoods. It is well written, and throughout characterised by good sense and good taste."

"This is an admirable little work, consisting of a series of sketches of backwoods life and labour. The treatment of the subject is original. The introduction of character gives it an interest not usually belonging to works of this description. Throughout we find many valuable hints on the backwoods' art of clearing up land, and leaving it when it is cleared. As a guide book to the intelligent emigrant and settler it will be of great service."

"The scenes laid in the primeval forest; the characters are the original settlers and their successors; and the whole work is a genuine picture of the difficulties, labours, and enjoyments of the pioneer in making homes for themselves in the wilderness. The author has had a long experience of this sort of thing, and speaks by authority. The volume is as reliable as it is interesting, which is saying a great deal for its reliability."

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THE BACKWOODS OF ONTARIO

AND

THE PRAIRIES OF THE NORTH-WEST.

PERSONAL AND INTRODUCTORY.

IN the month of December, 1857, I sailed from the Clyde in the long narrow steam-ship "City of New-York"—an emigrant bound for Canada: In the month of December, 1880—returning for the first time to "Scotia's shore," I am reminded that my life has been almost exactly divided between the old land and the new. Of the twenty-three years passed in Canada, the first eight or nine were spent in the heart of the Backwoods, where, at first, every feeling, sight, and sound was a new experience—the round of unaccustomed labour humble but hopeful; winter, with its inspiring cold; spring, with its new-born hopes, strange robins and blue-birds; summer, with its scented air; the whip-poor-will fluting in the moonlit woods; autumn, with its stores, October gold and purple haze—all was new and strange and fascinating. The impressions of these years have been as deep and abiding as the memories of childhood. The following sketches are the reproduction of those impressions, corrected and matured by later and fuller experience; their object is to enable the reader to picture to himself the humble life, labour, and surroundings of an actual settler in one of the back townships. Since their publication in Toronto in 1869, under the name of "Backwoods Life," I have curtailed them a little; but as the experience of all first settlers in the Canadian woods is the same to-day as it was ten or fifteen years ago, I have not to any extent altered or amended them; but having of late years lived and travelled in the new prairie province of Manitoba, and in parts of the North-West Territory, I have added a few sketches descriptive of that land of newer and brighter hopes and possibilities. I have tried the experiment of writing only what I conceive will enable the reader to realize for himself the aspects and ways of a new country. I describe what I saw, and what I experienced; what the country is, and what it is like.

Twenty-three years in Canada, I may take it upon myself to say a word to those who think of emigrating to that country. To the young and hopeful I would say, "Seek your future in the North-West; a few years of labour and patience will endow you with substance sufficient to make the rest of your life easy and independent. This may be counted upon as a certainty; if you will it with force and intelligence enough, you may have wealth." But to the elderly tenant farmer, unblessed with strong and helpful sons, I would say, "Rest content with a farm near some established centre, and let others do the pioneering." In the settled portions of Ontario improved farms are offered for sale every day; many Canadians with large families, the members of which cannot all be settled on expensive farms, are now anxious to dispose of their homesteads and begin afresh where they can get as much land as they want; while in Manitoba and the North-West—in the vicinity of railways, towns, and rising villages—there are still many of the first settlers and holders of land who have not the means to farm to advantage, and who are waiting for customers to buy them out, so that they may, with some capital, begin again on free land further away.

Let me say a word about what some people call the hardships to be encountered in the North-West. The hardships we hear about refer, for the most part, to mosquitoes and bad roads in summer, and the cold in winter. In the estimation of some people, these are hardships of a serious nature; in every case they are more or less of an annoyance, but it has often been remarked how lightly the most of people regard them after they have been a year or two in the country. There is no mistake about it, the flies can be overcome; the roads will mend; and substantial, well-built houses will keep out the cold. *Labor vincit omnia*. This is the motto for him who has the ambition to be a "Western man."

I need not say, for the reader will soon find it out for himself, that my little book differs from the ordinary run of Guide Books—it has not been written to order, and has no object beyond being a faithful representation of settlers' ideas of the country as it is, for the sole benefit of those who desire the information, or the entertainment which I also trust it will afford.

WM. F. MUNRO.

St. ENOCH HOTEL,
GLASGOW, 1st February, 1881.

PREFACE TO THE FIRST EDITION.

A FOOLISH dread of the unknown life of the Emigrant beyond the sea not unseldom interferes with the poor man's resolution to give it a trial. The timid shrink from change, and would be assured, if possible, as to their lot under new and untried conditions. To such, the fact may be made known that Canada is very rich in resources, and has many attractions for the immigrant and the settler; but it is doubtful if such information would sooner help to a decision than that which tended to familiarise the mind with the ways of the country—which made known the details, the ups and downs of the settler's everyday life, and showed how others, more forward, had begun and carried on the struggle for a home and a hundred acres in the Land of Freedom and Plenty.

Convinced of the utility of disseminating *such* simple information, I venture to proffer what is contained in the following pages—a very insignificant quota no doubt—in the hope that others, following in the same direction, may do more and better.

W. F. M.

TORONTO, *August*, 1869.

PART FIRST

THE BACKWOODS OF ONTARIO.

FORTY or fifty years ago, the wave of settlement which now over spreads what may be called the Peninsula of Western Canada extended to but an inconsiderable distance north of the two lowest of the Great Lakes, whilst along the shores of Lake Huron and the Georgian Bay scarcely an opening had been made—the interior still slumbered in primeval silence—a wilderness of beech and maple, the undisturbed home of the deer, the wild-cat, the wolf, and the bear.

What is now the thriving settlement of Corning's Mills, far to the north of Toronto, was at this early period known only from its beaver-dams to a few adventurous trappers, "native burghers of the wood," who, in pursuit of the mink and beaver along the creeks and rivers, were in reality the first pioneers of the Canadian woods: although, as in the case of the aboriginal wanderers, the mysterious tribes of the forest, with whom they often frequented, and whose mode of life they partly adopted, nearly all of them have passed away and been forgotten.

One of the nomads of this early hunting period, Elijah Corning by name, whose Indian tastes led him in his youth to adopt the wandering life of a hunter and trapper, was the first to settle down in the remote region now called after his name. His idea was to become the founder of a great settlement. With a few kindred spirits to begin with, inducements should be held out to others to join in the adventure; a grist and saw mill were to be put up as soon as practicable, and with the requisite number of settlers they would become a municipality; there would be a village, of course, the village would grow into a county town, perhaps into a city, for with luck, management, and a good location, the like, or very near it, had happened before; meanwhile, until the produce of their clearings was available for their support, and as often afterwards as they liked, they might turn to the hook and line, the rifle, and the steel trap, for the bass and speckled trout were abundant in the rivers, the beaver had not yet disappeared, the mink, the otter, and the musk-rat still haunted the lakes and streams, and still in prodigious numbers the lordly deer

"Arched his neck from glades, and then
Unhunted sought his woods and wilderness again ;"

or, if more exciting sport were desired, the grey wolf and the black bear might be tracked to their coverts in the swamps.



The spot selected by the old trapper for his hunting and pioneering experiment was, in his estimation no doubt, well adapted for the purpose. Northward stretched for many miles an expanse of as fine rolling hardwood land as could be met with anywhere in the province. Eastward the country abruptly descended, opening up into a valley of enormous dimensions, affording an illimitable vista of dark woods as a relief to the monotony of the dull level. To the west vast beaver-meadows, swales, and cedar swamps formed the head waters of several important streams. A prevailing feature of the country southward was the frequent occurrence of spring creeks and small lakes, prolific in fish and future mill sites.

Here, then, forty miles and more in advance of the very outskirts of the front settlements, with a belt of pathless woods between, over which the great immigration tide was only slowly rising, did our pioneer, with a few others whom he prevailed upon to share his fortunes, commence to build up an estate.

There is a beautiful fable of pioneer life on the Susquehanna, in which the poet attempts to delineate a phase of life altogether foreign to his experience, and makes this sad dramatic mistake—

“ It was beneath thy skies that but to prune
His autumn fruits, or skim the light canoe,
Perchance along thy river calm at noon,
The happy shepherd swain had naught to do ! ”

What a delightful time they must have had !

The muse of Longfellow, truer to nature, breathes the real aroma of the woods ; but the “forest primeval” of the poet, with its “murmuring pines, and hemlocks bearded with moss, indistinct in the twilight,” is not the home of the immigrant and the settler.

It is not to the poets we must look for the truth about the backwoods. No fiction of forest life, from the days of Arcadian Pan downwards, is at all like the reality—scenes devoid of human association and tradition, where Nature’s mystery is forgotten in the hard struggle to convert her wild haunts into real estate, under a patent from the British Crown. This is all the poetry of bush life as yet conceivable—*a home for the poor man, with peace and plenty to fill it.* Instances in which this ideal of Canadian romance has been realized, forming part of the writer’s own experience and personal observation, and more adapted to be of service to emigrants of the present day, will be given ; but the experience of Elijah Corning, an oft-repeated tale by the pleasant fireside of one who shared it from the beginning, must not be omitted, for therein will at least be found a word of useful warning.

It was in the early part of the summer of 18— that our pioneer set out to take possession of the tract of land which he had obtained as a Government grant, on condition of permanent settlement and certain specific improvements to be made, the principal part of which consisted in the putting up of a grist and saw mill on one of the streams, and the clearing of a certain number of acres in a given

time. Four or five others, bound in the same way as to clearing, undertook to go with him. They were all married men with families; but these were to remain with their relations until the following summer, when it was expected that houses, or at least shanties, would be ready for their reception.

Corning and one or two of the others were not without means, and took with them a considerable stock of provisions, tools and other necessities in two old lumber waggons, each drawn by a yoke of oxen. The old trapper knew the road well, for long familiarity with the woods had given him some of the Indian's instinct of locality; but with the loaded teams many a long roundabout, to avoid the gullies and swamps, had to be made ere they arrived at their destination, so that more than a week was occupied in the journey. At night, they halted in some convenient spot, and slept in the waggons, first kindling large fires, and turning the oxen loose with bells on their necks, to browse on the ground hemlock and maple saplings.

Arrived in safety at their destination, their first efforts were directed to the clearing of a small patch for potatoes and Indian corn—not yet too late for such crops—which would come in so handy in the fall, when they would all be tired of the hard hunter's fare. In a week or ten days they had nearly an acre cleared, fenced and in crop. This was on Corning's property, and while they were all to share in the proceeds, he was to pay back in labour to each the time given to this their first work done in the new settlement, about the hardest they ever did it in; for the timber and brush, not having time to season, were not in a condition to be treated as in ordinary cases, but had all to be moved off. They now went more systematically to work, and put up a good-sized log shanty near the little clearing; the roof consisted of elm bark, and the floor of hemlock slabs, obtained by splitting up the logs with wedges, and levelling them with the broad axe. Here they were all to live in common till the following spring. By this time each one had fixed upon a lot for himself; and looking at the selections made, we now see that our pioneers were either very poor judges of good land, or had an eye to something else than profitable farming. Corning himself had the roughest lot in the whole settlement, but no doubt he prized it on account of its water privileges. Another of the pioneers chose a very beautiful level lot, the recommendations to which being its close proximity to an almost interminable swamp, where the hidden snows of winter often lingered into June, nipping the wheat in the blade.

By special agreement with Corning, the other pioneers were to receive cash or its equivalent, either in labour or material, in return for their assistance at the work of clearing the mill sites, building the dam, and cutting the race, involving considerable labour, although—from the favourable situation and nature of the ground—it happened to be less than was expected. The part of the stream selected for the site was at the bottom of a series of rapids, where the channel, for a hundred yards or so, became wide and perfectly level, com-

posed—as in the case of the entire basin and bed of the stream, so far as it was known—of a species of shaly limestone, from the tilted portion of which it was an easy matter to obtain, with the assistance of the wedge and the crowbar, any quantity of material for the foundation. A day or two's chopping sufficed to take down all the trees necessary to be removed in order to proceed with the dam and mill-race. Immediately above the rapids the stream narrowed to the width of a few feet; and a little further up occurred one of the numerous beaver meadows, admirably adapted for holding water—which was, indeed, their original and legitimate function;—but having been abandoned, and the water-works getting out of repair, they were left high and dry for grass to grow on—a god-send to the early settler till he can raise his own hay. It was here, at the narrowest part of the channel, that the dam was built. The race, which required to be about a hundred yards in length, was dug out of the face of the hill on the right bank; and, owing to the roots and gravelly nature of the ground, was the hardest work of all. The next operation was to get the frames both of the grist and saw mills in readiness for raising. These consisted entirely of cedar, of which an abundance could be had in the swamps. It is a very durable wood; and, on account of its lightness, well adapted for all building purposes, especially when only four or five hands can be had for the raising. In this case the logs were all squared with the axe; the lowest, including the sills, being the heaviest that could be obtained, rested on a foundation of limestone slabs, right in the level bed of the river. No fear of freshets carrying the whole thing down stream, for it was only a little way to the parent lake, and neither heavy rain nor sudden thaw could make much difference upon it.

It was a source of great satisfaction to our pioneers when they had finished their raising, for it seemed like the accomplishment of their object. Here, for the present, however, the mill operations would have to cease, to afford to each the time necessary to push forward the clearing of a few acres for crop the following spring. At odd times, when not working for Corning at the mills, they had all been doing a little on their own lots;—one had about two acres chopped, the rest about one, which they now set themselves to burn and clear up for fall wheat, usually sown in September. They all worked together at the logging, going from one lot to the other until the whole was completed. Their fall and winter chopping would have to lie over till the spring, when, if the season was at all favourable, more clearing up might be accomplished in time for later sowing. On finishing their day's work, they returned to their common quarters in the shanty, where one of the number—in regular rotation—had taken his turn as cook, preceding the others an hour or two to attend to the duty of providing supper, as well as breakfast and luncheon for the following day. It was seldom they wanted venison, for none of them went out without his rifle, and the deer were always about. Once or twice they caught a bear in a primitive sort of trap, made of a frame of stout logs, baited with the

viscera of deer—so placed, that when pulled at by the bear, the top fell down, and poor bruin was a prisoner without reprieve, unless he was strong enough to break his prison, as he has been known to do. His chances were small, however; and the first that came along sent a bullet through his ear. This was rare sport, and brought good cheer and a valuable skin to the shanty. Then there was always at hand a plentiful supply of speckled trout, which, with tea and bread baked in the camp oven, furnished a rough but wholesome meal to men unaccustomed to the refinements of cookery.

They had brought five or six barrels of flour with them; but before entering upon their winter campaign they would require a further supply of this as well as other necessities, particularly pork, for which some of them would have to go to the front while the roads were passable. Corning, who also wanted lots of things for the mills, and to make some arrangement with a millwright to put up the machinery in the spring, decided to go himself, with another of the men, taking both waggons. The journey out through the late October woods gleaming with gold and crimson was pleasant, and did not occupy more than three or four days; but the return was attended with much hardship and suffering—the days were short, and there had been a heavy fall of snow; it was well for our pioneers that they were hardy, patient men, accustomed to camping out, and protecting themselves from cold and exposure. At length, however, they reached the shanty, which, during their absence, had been put in some better trim for winter. The chinks between the logs, having at the time of the raising been merely wedged with blocks of cedar, were now carefully stuffed with moss and plastered with a fine blue clay which happened to be at hand. They had also added a chimney with a stone base and hearth of sufficient capacity to take in logs of four or five feet, of which, in the cold weather, there would be no stint in such a "wooden" country.

The regular work of the winter now commenced. Besides chopping, each on his own lot, or in pairs, day about, they cut a road from the mills to the furthest away clearing, which they hoped would some day be a concession line along the front of the lots they had taken up. They also got the logs hauled together to where each was to have his house, and made them all ready for raising. Thus they continued until the snow became so deep that they could not conveniently attend to such work; they then betook themselves to hunting. The principal game was the deer, which they followed on snow shoes, going against the wind until chance gave them a shot. They had many a long tramp for nothing, but after all got far more venison than they could use. Corning had a way of tanning the skins soft and white, which made them valuable, and they managed to get a good many of them this winter.

The Canadian deer is a very graceful animal, differing little in appearance from the famous European stag. His colour varies with the season, being of a reddish brown in the spring, of a slaty hue in summer, and dull brown in winter. The belly, throat, and inner



face of the legs and tail are white. The buck only has horns—two small pointed ones the first year, but each succeeding year adds a branch, until complete ramification is attained. The antlers are shed every year, and renewed again in the spring.

Other game they took in considerable numbers—chiefly in traps at this season. These were caught principally for their skins, although some of them, as the porcupine and musk-rat, made very good eating. One or two small colonies of beavers, convenient to the settlement, were rooted out entirely. Musk-rats were very plentiful; they form a sort of connecting link between the beaver and the water-rat, deriving their name from the strong odour of musk which they emit, and which the skin retains for a long time. The body of this animal measures from ten to twelve inches; and the tail, which is somewhat flattened, and covered with rounded scales, mixed with whitish hairs, measures seven or eight inches. The colour of the back is dark brown, shading to red on the neck, ribs, and legs, and to ashy grey on the belly. It lives on the banks of rivers and lakes, where it constructs a series of winding passages or tunnels, opening from under the water, and sloping upwards to a single chamber, where the nest is built. It is a very meek, inoffensive creature; and, although armed with formidable teeth of the rodent kind, makes very little resistance when captured.

Another animal, which was rather abundant in and around the settlement, was the porcupine, belonging to the family remarkable for the occurrence of sharp horny spines intermixed with the fur, which of itself is a dark brown, but mixed with a sprinkling of whitish hairs, and the spines being also white, the animal has a greyish appearance. The body measures from twenty to thirty inches, and the tail about six. It has a round arched back, short legs, a small head, and invisible ears. The spines commence on the head, where they are thickly set, sharp and rigid, increasing in length and flexibility towards the hind quarters, where they again get numerous and sharp. The tail is armed in a similar manner. It lives in the hollows of trees, feeding principally on the bark. It is also a very mild and harmless animal, although capable of inflicting severe pain upon any creature that attacks it. Its only mode of defence is to strike a pretty sharp blow with the tail, which always leaves in the mouth or skin of its assailant some of its spines, and these being barbed with the points downwards to the base, every movement sends them further in, till sometimes they reach and pierce a vital part. Those who have the cruelty to send dogs after these animals have to be careful to extract the spines from the mouth and skin. But the most valuable animals were the mink or marten and the otter, of which the streams in and around the new settlement afforded a good many. The mink is an animal almost exactly like the ferret, except in size and colour. The fur is brown and now much sought after, coming next to the sable, which it somewhat resembles. It is a water-loving animal, frequenting the banks of still lakes, marshes, and rivers, where it feeds on fish, frogs, and aquatic

insects; its feet are slightly webbed, so that it is a good swimmer. The Canadian otter is much larger than the European species, measuring about forty inches from the nose to the tip of the tail. He lives almost entirely on fish, and is very particular in his selections. Having often to change his quarters in winter, when they get frozen up, he is sometimes caught on an emigration tour; but it requires expertness with the snow shoes to get near him, for he takes to diving in the snow in the same way as he does in the water. He is said to be remarkable also for the school-boy trick of sliding down slopes as a sort of pastime, with which the steel traps cruelly interfere sometimes. The fur is of a shiny brown, and very durable.

Our pioneers, between hunting, shingle-making, and attending to their cattle, having managed to put in the remainder of the winter, were now, as the snow began to wear away, in a position to attend to other matters. They went to work and hauled a quantity of saw logs to the mill, so as to be in readiness for sawing, as the first thing required both for the grist mill and the houses of the settlers was lumber. The next thing was the raising of the houses, performed with much less ceremony than usually attends this important operation where there are lots of people together. In every case the logs, principally cedar, were cut and ready, so that the putting up of the walls and rafters, cutting out the windows and doors, took up very little time. The spring had now fairly set in, and the notes of the robin and blue bird sounded sweet in wold and wood. In confident anticipation of the mill being in operation before another winter, with the additional hope that summer would bring an accession of new settlers, who would also be good customers for their flour, they now proceeded with the logging, clearing up and fencing of their winter's fallows. This, with the subsequent sowing and planting of the same, kept them busy till the middle of June; when Corning, being now ready for the millwright, set out once more to the front with the waggons. This time, the roads being good, ten days sufficed for the journey in and out. The millwright and three or four new settlers came in along with the teams. Corning now applied himself exclusively to the fitting up of his mills, which he intended to run himself, having had some experience in that line; but it is unnecessary to follow him through their whole process, extending even to the manufacture of the greater part of the machinery, such as it was. Suffice it to say, that before harvest the saw mill was running, and sufficient lumber cut for the more pressing necessities of the settlement.

After attending to the beaver-meadow hay and the harvest, Corning took the road again, this time to bring in the families—his own and those of the other pioneers. Returning with these and a couple of new settlers, he found the grist mill running, and the settlement therefore an accomplished fact. The old trapper did his best to make known what he had done, even undertaking another journey to the front before the winter set in, with a sample of the



wheat and flour of "Corning's Mill," as the place has ever since been called, in order to prove that it was a place, and that people could live in it; but somehow or other, notwithstanding all the colouring he was able to give it, people did not seem to be willing to undertake the risk of settling so far away in the woods. Forty or fifty miles away from the lakes was thought far enough to go in those days, and so it was, especially for the immigrant, who had not yet acquired the Indian relish for unbroken solitudes, nor learned the hunter's art of living contentedly therein. And thus it was that the now flourishing settlement of Corning's Mills remained for many a weary year a sort of *Ultima Thule* of backwoods life, having about as little to do with the lake-board as the old out-post of Niagara, in far earlier times, had to do with the Atlantic sea-board settlements, when a broad belt of the fierce Iroquois still girdled the country between from the Richelieu to the Detroit.

Fifteen years' endeavour on the part of Elijah Corning and his pioneers to make a great settlement out of what in their time was perhaps the most unfortunate location that could have been chosen, had resulted in the addition to the original number of only some ten or twelve families, of various nationalities, all very poor by this time, living in a primitive sort of way apart from the great world, and knowing little or nothing of its doings. The most of these, however, were men well adapted for such a life, and probably could not have succeeded in any other; still there were a few, of whom two or three were immigrants, led, they hardly knew how, to such a queer out-of-the-way place, who, from their former experience and mode of life, were ill adapted for "roughing it in the bush" after the fashion which had hitherto obtained in the settlement of Corning's Mills. Some of these, their patience worn out in vain anticipation of better times, had left altogether; their small clearings, with the deserted log shanty in the centre, remaining behind as a monument of wasted labour and final defeat.

In any settlement, however flourishing, there will always be some that are unlucky and shiftless; but here, where the whole thing had been a mistake from the beginning, they had all become more or less shiftless. Corning was now an old man, and his policy towards the few intending settlers that from time to time made their appearance was very stupid. When any newcomer wanted to get possession of what was considered a desirable lot of land, with perhaps a spring creek, a little cedar or pine, or anything that was thought to enhance its value a little, the old trapper would probably give him to understand that somebody else had spoken for that particular lot, or, having direct control of the same, would ask an unreasonable price for it. The consequence was that the land lay uncleared, and the mills idle. But better times are at hand.

What first gave the place a start, was the opening up, by the Crown Lands Department, of some thirty or forty miles of a road

which run past the settlement, some few miles to the west. The lots on both sides of this road were of one hundred acres; and, by what was considered in those days, a great stretch of legislative liberality, one half of each lot was offered as a free grant to actual settlers, with the privilege of purchasing the other half, the design being to encourage the sale and settlement of the extensive tracts of the public land still unoccupied in that quarter. The immediate result of this enterprising policy was, that a large number of visitors on the look out for land made their appearance in and around the settlement of Corning's Mills.

Unfortunately, a good deal of the land along the new road was of a very poor quality—long stretches of tamarack swamp, alternating with sand banks and ridges of gravel. A great many poor ignorant settlers, after striving a year or two on the miserable lots they had taken up, spending their last cent in the vain hope of succeeding, were at length forced to give up. Some of them, however, with quite a number of others who did not avail themselves of the liberality of the Government in the matter of the free grants, bought the Crown land that was for sale in the vicinity, and settled down.

It may here be remarked that a bee-line of road or railway is proverbial in Canada for passing through the very worst parts of the country; and casual travellers, not taking the trouble to look round, see everything in an unfavourable light. The free-grant district of Muskoka furnishes, at the present day, a very remarkable instance of this sort. The entrance to this flourishing part of the country includes a portage of fourteen miles from the head of Lake Couchiching to Lake Muskoka, through a real "Valley of Baca," to pass through which and hope for good beyond must have exercised the faith and patience of not a few. The writer has travelled this road with those who no sooner got to the end of it than they turned right back laughing at the credulity of those who believed in the existence of something better further on; and yet farther on, north, east and west, the great tide of settlement is ever flowing, filling up areas that, though sometimes rough, are found to be as productive as any land in the Province of Ontario. The district is one of the healthiest on the whole Continent, and the scenery of its lakes rivals that of the far-famed Loch Lomond.

In most of our new settlements of the present day, especially those where the free-grant system prevails, the constant stream of settlers pouring in, along with the extensive lumbering operations generally going on, originate a demand for labour, a matter of the first importance to those who have no means, and who cannot afford to wait until the produce of their clearing becomes adequate to their support.

The free-grant experiment on the line of road passing near Corning's Mills had a marked effect upon the old perfunctory settlement. Money, which in former years could only be raised by the sale of skins, or by labour in the harvest fields of the more advanced parts of the country, now began to circulate—the result of

numerous small sub-contracts on the new road, and of the influx of new settlers, whose mouths had to be filled, and whose accession to the neighbourhood was, at the same time, a welcome relief to a community so long excluded from the rest of the world.

One of the first institutions of a new country undergoing anything like rapid settlement is a tavern. The inference, however, is not that settlers as a class are more addicted to the use of intoxicating liquors than others. The tavern in Canada, especially in the backwoods, still bears something of its old English signification; it is a place of hospitable entertainment for man and beast, and, as such, is one of the prime necessities of a new country, particularly in that season of the year when an hour's ride often reduces the caloric in the human system to a degree which renders the sight of a roaring fire, with a glass of "hot stuff," an almost indispensable condition of travelling. The man who has the courage to move into a new country in the course of settlement, taking with him a span of horses, or a yoke of oxen, with the material to set up a tavern—say some whisky, brandy, flour and pork is considered a sort of public benefactor, and if he keeps sober and minds his business, there is no fear of his future. Let no one, therefore, judge rashly of the tavern, or imagine that the tavern-keeper is, *ex officio*, a publican and a sinner. Nor needs the traveller scruple to sit down to his meal, or lie down to rest, if it should only be on the soft side of a plank; he will find mine host do the fair thing by him, for he is generally a sturdy honest fellow, and has the credit of the settlement to maintain. But the backwoods tavern to do well must only be attempted where there is a steady current of settlement, otherwise it does not pay, and dwindles into something very like a shebeen, to the injury of the whole place, as happened to some extent in the case of Corning's Mills. Here the tavern had been early started. Joe Rogers, the proprietor, having moved in a year or two after Corning and his pioneers, and for a while working manfully with the others, had succeeded in clearing some thirty or forty acres; but the stimulus of rapid settlement was wanting, and it never had the healthy and stirring appearance which in general preserves from temptation the host himself, as well as his neighbours. A good many had become confirmed toppers, and often "loafed around" the bar, when they ought to have been at work in the field or the fallow. But mine host of the "Wheat Sheaf Inn," a year or two previous to the opening up of the country, as above mentioned, had sold out the whole thing, farm and tavern, to his next door neighbour, and gone no one knew where. The purchaser had no intention of carrying on the business; but the new aspect of affairs enabled him to let the premises and part of the clearing to a new man, who very soon put things to rights.

The main reliance of the backwoods tavern is in lodging and assisting the new settler. A good span of horses will always be in request, and, with the hired man, will command from three to four dollars a day, and the settler is glad to get the help they afford.

If there is flour and pork to be had within a reasonable distance, it will pay well to keep these necessities in stock; so that a shrewd, careful man, willing as well as able to turn his hand to anything that offers, is always sure to get plenty to do. In ordinary circumstances the custom of the place is derived from the passing traveller, who generally stops and waters, if not feeds, his horses. In winter, especially, when everybody travels, people are glad to stop a few minutes "to warm up" and have a glass of beer or "hot stuff," which, be it understood, is a concoction of warm water, ginger, and sugar, with not unfrequently a little whisky or brandy. Friend meets friend, and one takes his turn of treating the other, often asking all those present in the room to step up to the bar and partake of the treat. On accepting the invitation, each one calls for what liquor he wishes, pours out his own glass, and drinks it standing at the bar or counter. The ladies are generally accommodated with a sitting-room off the bar-room, where they have an opportunity of enjoying their treat unmolested.

The backwoods tavern is often the meeting-place of the township council, which attracts those who have a taste for beer and public business, those who have appeals to make against assessments, claims to prefer for settlement, plans to propose for the common weal. It is often a motley and noisy gathering, with but little outward manifestation of reverence for the assembled wisdom. A fruitful source of revenue is derived from the annual elections of Municipal Officers (Reeves and Councilmen), Common School Trustees, and more rarely Members of Parliament. The prevalence of Orangism in the backwoods is also in the interest of the tavern. The anniversaries of the "Twelfth" and the "Fifth" are usually celebrated by suppers and balls, at which there is always an abundant retail of beer and bad whisky. Nor is the annual shooting-matches to be overlooked. About Christmas mine host has provided a whole flock of geese and turkeys, which are set up as marks for the rifle. Young people are rather fond of this sport, and on its account often spend more money and drink more than they ought to do.

Such is tavern-keeping in the backwoods. Let the immigrant have nothing to do with it until he is perfectly acquainted with the ways of the country, and then he is not worth much if he can't do better.

Wherever there is a rush into a new settlement, some one will always be ready to turn it to account in the way of business. The opening up of the country to the west of "Corning's Mills" had been noted by an individual of the name of Small—an immigrant of two or three years' standing, on the look-out for a place in which to try his fortune as a country merchant. Mr. Small was a Cockney tailor—a timid little creature, and one of the last men you would have expected to meet so far from home. Weak in bodily presence, and in speech contemptible to the last degree—his voice never rising above a girlish squeak—there existed a strength in his natural acquisitiveness alone which made him a match for the terrors of a

wild and unsettled country. This careful little man had managed to hoard something like two hundred pounds before he left London ; and, on first coming to Canada, had obtained a third-class certificate, and taken to common school teaching in some rural section on the outskirts of the front settlements, distant from Corning's Mills some fifty and sixty miles. Here he had saved his money and learned the ways of the country—so essential to success in the life he had laid out for himself.

It was in the early part of the fall of the year that the "Apostle Paul"—as the settlers learned to distinguish this enterprising tailor and pioneer storekeeper—leaving his family provided for in the place where he had been last employed as a teacher, first made his appearance in the settlement in the capacity of itinerant local preacher, ministering to his own necessities, in true apostolic fashion, by the labour of his hands and fingers—a welcome visitant to the homes of the settlers with his needle and pleasant little ways. He belonged to the West End of London, and was great on "Society" and "Idle Park." No doubt the neighbourhood and companionship of brawny, belted and booted backwoodsmen—hairy as to the face, and in manners gruff a little sometimes—were not what Brother Paul would have preferred ; but, with other vicissitudes of fortune, were endured with the most praiseworthy resignation. Not in the least degree boastful of any undue partiality for adventure, he had good reason to hope for immunity from fear of attack by any of the more savage animals, still numerous enough in the depths of that primeval forest. It is true he had been badly frightened more than once ; but it was never known to this day that anything more terrible than a turkey gobbler ever thought of running away with the "wee tailor."

In a short time Mr. Small got acquainted with all the old settlers of Corning's Mills, who were delighted at the prospect of his going to keep store among them ;—a man of his experience in temporal and spiritual matters would be a decided acquisition to the settlement. So that when he fixed upon a lot, and was prepared to go on with his house, they turned out to a man and put it up for him ; not only hauled the logs and raised them, but shingled the roof and laid the floor—all the cost being the shingles, the lumber, and the nails. One half of the house, which measured twenty-five by twenty-four, was partitioned off as a store, with an arrangement of shelves and a counter ; the other half was divided into apartments, which the family would have to put up with for a little as a dwelling. The inside work of both store and dwelling was done by one of the settlers—a sort of country carpenter—assisted by the tailor himself, the whole thing costing not over a hundred dollars. The stock arrived two or three weeks after the house was finished ; with it came Mrs. Small and the two children, a cooking stove, and several articles of household furniture.

Of foreign goods and merchandise, the Dominion of Canada imports annually to the value of many millions of pounds sterling, the distribution and sale of which, by wholesale and retail, along with the

products of native growth and manufacture, give rise to a prodigious amount of store-keeping one way and another. In the wholesale line, in spite of numerous transactions turning up on the debit of profit and loss, a large and profitable business has been done. New houses are continually starting into competition. Old ones are extending their connections, and in many instances enlarging their premises; but, upon the whole, it is a question whether this department is not beginning to get a little overdone. In the retail branch there is a very manifest overcrowding—hardly a little village in the whole country but has its three or four stores eagerly competing for business. It does not require a very great capital to begin with in some places, and credit is easy to obtain; hence, on the part of some who have unfortunately learned to despise the honest and manly profession which made their fathers independent, there is an unhealthy craving after mercantile pursuits. Many a foolish son has brought his old father to grief by a vain conceit that he was going to make a fortune as a merchant. Set up in business with the aid of a mortgage on the old homestead, everything goes on well for a time; but the stock runs down, and the money has not come in to renew it, more security is demanded on application for more goods, another mortgage has to be given—and so on, till farm and goods and all are gone.

But the backwoods storekeeper is at first hardly recognised as being "in the trade," or in a position on the books of the "Mercantile Agency;" hence the preceding remarks on business and insolvency apply less to his present circumstances and those of the new settlement than they would after some progress has been made. At first his stock will consist of the most ordinary staples. In the "dry goods" there will be no occasion to invest in West of England broadcloths, silks, or satins. Strong factory cottons, drills, denims, cheap prints, Canadian tweeds, and woollens will be the most distinguishing features in this line. In the clothing department there will be an assortment of heavy Canadian overcoats and pantaloons, with some lighter tweeds for those who have not yet the resource of home manufacture; but wool-growing, soon to be followed by the carding mill, will afford an abundance of good substantial home-spun, better than any shoddy stuff to be had at the store. In the line of "boots and shoes," the first stock will be limited in general to the variety "stoga," a boot reaching to the knee, and worn outside the pantaloons, of substantial cowhide and thick sole, indispensable to the comfort of the nether extremities in the mud and slush of the spring and fall. In the dry fleecy snow of winter, however, the Indian moccasin is found to be the best covering for the feet, and any one with a little ingenuity can make them. The best material is buckskin, which may be tanned soft, and is very durable; made to fit like a stocking, the exercise of every part of the foot keeps it warm in the coldest weather.

In the hardware line, there will be lots of shingle and other nails, a few of the more common tools, and if there is anything like fair hunting, a pretty good variety of steel traps; but the staple article

will be the *axe*—which ought to have been our national emblem—everything depending upon its “heaved stroke.” It is a simple steel wedge, of rather inelegant form, measuring about eight inches in length by four and a half to five inches along the edge, narrowing to three inches towards the other end, where the handle is inserted, which is three feet long; it is sold by weight, which averages about five pounds.

In the grocery and provision line, the staples will be at the first outset, flour, pork, and tea. Until there is a grist mill in the settlement, the storekeeper may have to bring his flour a considerable distance, in which case he will require a team of his own, and it will have plenty to do to keep the stock up if settlers are crowding in. Under ordinary circumstances, however, it will not be long till the settlement has a mill of its own, and then the miller himself will attend to the flour market, stocking it with his own manufacture.

Pork will be in active demand until the settlers are in a position to raise their own stock. In winter the genuine backwoods lumberman prefers his pork in the form which goes by the trade name of “Heavy Mess,” consisting of the shoulders, ribs, and flanks of the fattest and heaviest hogs, salted and put up in barrels, containing exactly two hundred pounds. The Montreal standard of inspection requires that there should be not more than sixteen pieces in a barrel—four shoulders, eight ribs, and four flanks. “Prime Mess” is another trade name for an inferior description of barrel pork, put up in the same way as “Mess,” but not selected. The lumberer will live a whole winter on fat pork, bread, and green tea soup, for it can be compared to nothing else, boiled for hours in a large pot, and as black and bitter as gall, without either cream or sugar. This will hardly do for the ordinary settler, however. Pork, in the shape of dry cured hams and sides, will find more favour with him, as well as a cup of tea in the usual way, though very often minus the sugar.

Let me be understood as describing the most elementary condition of the trade; a very few years will make a difference, and the storekeeper will always know when to vary and extend the different lines in accommodation to the growing wants of the settlement. At first he will be able to command his own prices, but immoderate charges will soon induce competition, so that he had better be reasonable.

Our friend, Mr. Small, was blamed for charging too high for his goods; but he either got what he asked or people did without. There were lots of travellers during the winter; settlers were also crowding in, the tavern was full all the time, so that the store had to be re-stocked more than once before spring. Between tailoring, preaching, and serving at the counter, the little man had enough to do; but his heart was in the work, and he devoted his whole energy to it. He was the very soul of order of neatness, and when one had money to spend it was pleasant to give him a call. His terms with new settlers and travellers were, of course, cash, so that he turned over quite a respectable sum of money during the winter.

The same thing went on through the summer. Mr. Small was obliged to get a horse and waggon of his own, and made several trips to the wholesale market for goods, bringing the lighter part home with him, and hiring teams belonging to the settlement to bring in the balance at so much per hundredweight.

Everything seemed to prosper with Mr. Small. There was no rent to pay; the taxes were only nominal; firewood cost no more than the trouble of cutting and hauling; butter and eggs were to be had to any amount in trade, and the strictest economy in house management being observed, the wee tailor could not help getting rich. Without entering into details, the general result was that the little store expanded into a big one; Mrs. Small got a gold watch, the first that had been seen in the settlement; the girls, Lucy Jane and Mary Sophia had to get a "pianer," which their accomplished little papa could both tune and play. Next came the light waggon or "buggy," for summer, and the gayest of family cutters for winter use and amusement. Meantime unpaid store bills were growing into mortgages on the lands of improvident settlers, ultimately to grow into the land itself, and all within a period of ten years. So much just now for Mr. Small and the first store at Corning's Mills.

The first store at Corning's Mills had long monopolized its trade; you could not buy a pound of tea or a flannel shirt nearer than Appleville, one of those embryo villages sprouting up all over the country, thirty miles to the south; but now, with increased resources and the steady influx of new settlers, came also competition in trade. Mr. Small was destined to encounter a rival.

A certain canny Scot, hailing from Aberdeen, had begun the New World on a farm in one of the front settlements, where he had made money and "raised" a large family of fine smart boys, a stock said to depreciate in value a little after the land is all cleared up, but which is always at a premium in the backwoods—so useful is it there to have a lot of little willing hands to help putting in the potatoes, to pick up chips for the cooking stove, and the log heaps burning in the fallow, hunt eggs, mind a gap in harvest time, and look after the ducks and geese at nights. With a watchful Scotch eye to his own and his boys' future, Mr. Perth had long been on the look-out for a wider field in which to exercise his energies, and make suitable provision for the demands of an increasing and hopeful family. A farm for each of his sons was not so easy to be had in the old settlements, but quite possible in the back townships. He had heard of Corning's Mills, and the attempt of its founder to make it a great place; saw at once his mistake, and believing that he could work the concern, entered into negotiations with the old trapper for the purchase of the mill property. Mr. Corning was willing to sell, for he was now old and infirm, and most of his family had left him—still clinging to the hope of realizing his original idea, but from the absurdity of the thing itself, and the foolish means by which he

endeavoured to carry it out, ever doomed to disappointment and defeat. Poor Corning had never been himself for more than fifteen years previous to this—one great calamity was always quoted, as accounting in some degree for the failure of his scheme, as well as the numerous eccentricities that marked his life and conduct. *Two favourite children, in company with two others belonging to different families, who had just settled in the vicinity of the mills, went into the woods one evening to bring home the cattle, and never more returned.*

"Not that day nor the next, nor yet the day succeeded
Found they trace of their course in lake or forest or river."

This terrible event cast a deep gloom over the whole settlement; the men did nothing for weeks but scour the woods in vain search for the lost little ones. They never were found.

"The Indians stole them off, and away they did go,
Which sunk their loving parents in sorrow and woe;"

two lines of a woeful ballad of indigenous production, which affords the only probable clue to the fate of the lost darlings.

Many heart-rending instances are on record of children, as well as grown-up people, getting lost in the woods; but seldom has it happened, as in this case, that no trace of them could be found. The suspicion that they were kidnapped by the Indians was strengthened almost to conviction from the fact that Corning had quarrelled with some of them only a few weeks before, refusing to supply them with flour in exchange for venison, which he did not want at the time. In these days, there is no fear of kidnapping but there is always more or less risk of finding one's self astray in the woods. By a kind of instinct the Indian detects in the appearance of the trees the signs which are the same to him in his wanderings that the Pole Star is to the navigator; but the white man takes long to learn them, and when he ventures beyond his bearings, the chances of finding his way out are considerably against him. Coming across some deer or cattle track, he is tempted to follow it; if in daylight he travels on, facing the sun perhaps, which leads him in a circle, and lands him at nightfall exactly where he set out. The best thing he can do on finding himself astray, is quietly to sit down on the first log, and wait there. He will soon be missed, and his friends will hunt him up. Or if he hear a cow-bell, let him find the animal, and begin driving it, he will shortly be homeward bound. The best thing he can do, however, is not to go beyond his reckoning, which will always be getting wider the longer he lives and travels in the bush.

A word or two as to the mills and the mill property now in the hands of Mr. Perth. It is not unusual to speak of a grist mill in the plural; but here, as we have seen, there were both a grist and saw mill, and both on the same stream. Long ago Corning and his men laid the foundations of solid cedar, right in the bed of the river, but

constant exposure to the action of water was beginning to tell upon them; whilst the machinery, put up at first more with the view to immediate use than durability, and now having had more than a quarter of a century's noisy and dusty existence, it was no wonder that it had a queer rickety way of proclaiming the service it did for people. But no apology was felt to be necessary in speaking of the water-power. However much Mr. Perth might improve the grinding and sawing capacities of the old mills, he could do little to improve the stream on which the whole depended. Rising in a small lake not half a mile from the mills, and fed by innumerable springs all the way down, it had a splendid fall, and neither the drought of summer nor the frost of winter affected its even flow. Its parent lake, covering an area of thirty or forty acres, is something of a curiosity by the way. Parts of it are profoundly deep; but along the shelving banks, and on one or two bars running nearly to the middle, there are only a few inches of water, and here there is a constant precipitation of lime in fine white particles, probably the result of carbonic acid from decaying vegetation uniting with the lime in solution in the water of the lake. This precipitation of lime appears to have been going on for ages; for the soil to an unknown depth all around the shore, and along the entire basin and bed of the river running from the lake, is nothing but a mass of granulated lime waiting for some cohesive agent to turn it into rock, or, more likely, for some ingenious farmer to apply it to the purposes of agriculture.

When Mr. Perth entered into possession, there were no other mills within a radius of thirty miles, so that it was no more than reasonable to expect a fair return from any outlay that would be required to put them in a state of efficiency. A thorough renewal of the whole was accordingly decided upon. This was a big job, involving considerable labour and expense; but, commencing it early in the spring, it was completed in time for the first grist of the following harvest, to the great satisfaction of the whole country around.

It must have been when his customers were lounging about waiting their turn at the mill, smoking Mr Small's tobacco, that the idea of a mill store occurred to the shrewd Aberdonian. These men might as well buy their tea and tobacco from him as walk all the way to the wee tailor's; and surely he could sell as cheap as Mr. Small, and was in a position to "trade" or deal in kind to a much larger extent than his rival, who could only handle butter and eggs, and that to a limited extent; whereas Mr. Perth would be no loser by taking the wheat, even at its highest market price, for he could turn it into flour, which was a cash article, and always in demand.

It was a serious blow to the wee tailor, who would now have to compete in business, as well as in township politics, with a man of substance and ability. Mr. Small had long ago given up preaching and taken to the forum. He had been Reeve of the township ever since its recognition as a body corporate, which took place five or six years previous to the advent of Mr. Perth, and was the result mainly

of the tailor's effort and enterprise. A fault-finding opposition might easily discover some weak points in his administration of public affairs. It was a matter of notoriety that ever since the organisation of the Township Municipality and the School Section, Mr. Small's business had been greatly extended. People remembered how he succeeded in obtaining the sanction of the County Council—a body composed of the Reeves of the township—to a motion, by which the municipality over which he had the honour to preside was authorised to borrow a considerable sum of money on the credit of his township debentures; how the said money, in great part, went to pay a cloud of petty orders, drawn by himself, in his official capacity as Reeve, in favour of parties who had been small contractors for work on the public roads; how the said orders, although legally enough drawn on the Treasurer, that individual, in some unaccountable way, had seen fit to dishonour, until, despairing of ever seeing their money, the holders had been glad to avail themselves of their Reeve's generous offer to discount for them. Of course this could only be done in trade; and the rate of discount, owing to the great risk and uncertainty of the transaction, would have to be *fifty per cent.* From the debenture scheme, however, there resulted an overflowing exchequer, and the credit of the municipality was triumphantly sustained by paying 20 shillings in the pound. The contractors who had accepted the commission grumbled a little, and remembered the transaction.

Among the liabilities of the Municipality, discharged in full out of this plethora of public funds, were several arrears of school moneys, which enabled the section to build a very respectable school-house. Sometimes a new Methodist preacher, not yet into the secret, at the close of his discourse in the new edifice—for it was as yet the only meeting-house—would be betrayed into eulogising the intelligence of “a community which had distinguished itself by such a noble effort to promote the cause of education.” In comparing the school-houses he had seen in other parts of the country with this elegant, roomy, and comfortable structure, he was constrained to admire the wisdom and liberality of the settlers of Corning's Mills; and it was a source of great satisfaction to him that his lot should be cast for a time among such an open-handed people. It was a good joke, much relished by the opposition, who were fond of ventilating the debenture scheme as a means of taking the wind out of Mr. Small's sails at the next election of Councilmen and School Trustees. Little rivalries like these exist in all rising settlements; and the fact should be known, if a little at the reader's expense.

A highly-respectable Border Scotsman, of the name of M'Crie, who had been brought up a tanner and currier, and had carried on at home a small business on his own account, finding that with the limited means at his disposal there was rather a small chance of successfully competing with others longer established, and possessed of more capital than he could command, made up his mind to try what

his skill and industry could do for him in the New World. Arriving with his family in the fall of 18—, he took the wise plan, recommended by a friend, of moving at once to a comparatively new settlement, and took the first chance of work that offered in his line, waiting in patience for more light as to the ways of the country, and his proper course therein.

Hearing at length of Corning's Mills, he visited the place, and finding that the prospect of an opening for a small business in the way of his trade was somewhat encouraging, made a bargain with the new proprietor for a small lot of three or four acres, having a stream with a water privilege upon it.

Having put up a two-storey log-house, the upper part to serve as a dwelling for the meantime, he moved his family in and proceeded with the fitting up of his vats and a water-wheel. Here, not having previously been called upon to apply the hydrodynamics involved in his profession, and too readily listening to those whose experience in that department of practical science was even less than his own, he found that his vats would not hold in, and the water-wheel would not turn the bark mill. Other plans were tried, but with no better success. Had Mr. McCrie not been bound to succeed, here was a good chance to give the whole thing up in disgust. He had worked hard and spent his last shilling; but if he could only get his business in operation, there was a fair prospect of doing well. With some little assistance from a friend, a practical mechanic was found to undertake the job under bonds to complete it to satisfaction, and in due time the thing was done to perfection. The bark of the hemlock, used almost exclusively for tanning in Canada, could be obtained at a merely nominal price; and of the raw material a fair supply could always be reckoned on, as every farmer killed a beef or two once a year for home use, and what was taken to market was also killed at home, it being easier to team it out in sleighing than to drive it out. Hides, therefore, began to grow into leather, a shoemaker was engaged to work it up for the market in the shape of long coarse boots, which, being the only thing worn, was in considerable demand, and a cash article. Thus the business assumed an encouraging aspect. Tanning used to be not a bad business in the backwoods, where the shoemaker and saddler could work up the produce of the tannery, and in this instance it bode fair to do well. Mr. McCrie was well posted in his trade, and with great industry and frugality the clouds that had been gathering around him gradually broke up and dispersed. Mr. McCrie had acquired a character for perseverance and integrity; he was strictly conscientious and imbued with deep religious convictions, a most valuable addition to the settlement. He was the first to take an interest in the religious and secular instruction of the young, and devoted much of his time and energy to the establishment of a Sunday school, of which he became an efficient teacher and superintendent. For several years everything went well; he built a fine dwelling-house on the hill above the tannery, and could now look forward to the enjoyment and con-

venience of a suitable and substantial habitation. But, alas! in singular verification of the old French proverb, "When the house is finished death enters;" he no sooner had everything ready when the "blind fury with the abhorred shears" put an end to it all. A favourite child died at the same time; and of the two now sleeping side by side in their forest grave it is written on a marble slab, white as drifted snow, that "they were lovely and pleasant in their life, and in their death they were not divided."

It would be hard to conceive of a blight more desolating than what thus befel this worthy family, far away from home and friends. What was the poor widow with four helpless children to do? She tried to sell the place, but nobody would buy. She was urged to go back to Scotland, but the dread of being a burden upon others would not let her. Nobody could conceive of what it was possible for her to do. What she did resolve to do affords a striking illustration of that characteristic Scotch courage which rises so nobly to the promptings of duty. While the life was in her she never would submit to see her children paupers, nor would she sit down and see them starve, but she would gather together the wreck of her husband's means, and, God helping her, keep a little store—a "wee shop" as she would have said long ago—rather an unpromising outlook in such a place as Corning's Mills. Lose or win, however, she would try, and did try. The little store was near the school-house, now overflowing, and young folks became frequent if not very substantial customers, and not unseldom were intrusted with orders from home, when fathers and mothers were too busy to go shopping themselves. Mrs. McCrie could not hope to compete with her more wealthy rivals, working as she did with so many disadvantages; but people admired her pluck, and gave her a share of their custom. "It was aye something," as the brave little woman used to say.

The three stores, the origin of which has thus been given, being all in the vicinity of the mills, constituted with these the rudiments of a village, to which have to be added the tavern, the school, and the blacksmith's shop. The weaver had also set up his loom, and the shoemaker his stool. Something interesting to intending settlers might be told of each and all.

Thirty-five years ago, when Fergus O'Connor, of Chartist celebrity, was propounding his foolish land scheme, there was considerable excitement over it among the weavers and other operatives of several towns of the West of Scotland. Paisley—long noted for shawls and spouting weavers—was especially smitten as to its Chartist element with the "small farm" fever. Numbers connected themselves with the movement, paying into the concern two, three, and four shillings a week of their hard earnings, for the glorious chance of becoming the lucky owner of a farm of *four acres*—proved by Chartist logic every week, in the columns of the *Northern Star*, to be more than enough for the wants of any reasonable family.

John Gilmour was a great admirer of the *Northern Star*, and a convert to the land scheme. He had paid up the subscription—something like five pounds—which entitled him to a throw; but, if I recollect right, the chance was only one in a hundred, and, fortunately for poor John, it never came. The whole thing ended in smoke. It had this effect upon the weaver, however; he determined to make a strike for a hundred acres in Canada.

John had been a shawl weaver, when that branch of the business still afforded the means of a livelihood to the ordinary workman; but the time came when only the more superior tradesman could be entrusted with the production of the elaborate and expensive shawls then in vogue; so that, not ranking among the first-class artists of his profession, John had to "pit up wi' a bit tartan;" but, industrious man as he was, and blessed with a thrifty guidwife, who rocked the cradle and "kep the pirn-wheel bummin' frae mornin' tae nicht," he was, after all—notwithstanding the unfortunate result of his recent land speculation—able to save a few pounds, a rare thing in a weaver of his day. Paisley weavers are well represented among the yeomanry of Canada at the present day, and few have made better pioneers than they. Their long practice at pitching the shuttle from right to left, and from left to right, was of capital assistance to their acquiring the proper swing of the axe. But the Paisley weaver of thirty years ago seldom thought of emigrating. He was then too poor; and the slavery of the loom had begotten a craven fear of out-door labour, and an aversion to change, which were hard to overcome. Distance, instead of lending enchantment to the view, gave him faintness and sinking of the heart. But John Gilmour was determined not to give way to any such weakness. It would be hard to give up his old haunts; his Sunday walks to Gleniffer, and "a' the bonnie places roon' about"—yet, for their sakes that were dearer to him than all the world, nothing in the way of mere sentiment should be allowed to interfere with his determination of making a bold stroke for liberty in the land of freedom and plenty. In accordance with this resolution he succeeded, after years of toil, in raising a sum sufficient to bring himself and his family to Canada. By a strange chance he found himself landed at Corning's Mills. When he arrived at the tavern he had only a few shillings in his pocket—a dreadful picture of his situation our friends at home would be apt to conceive: a stranger in a strange land, and so destitute! The weaver must have been "daft" or wicked in tempting Providence after this manner. It is an extreme case, I admit; but not at all dreadful in a country like this. The weaver, it must be confessed, was not in the best of spirits on finding himself at the end of his journey, and his means nearly exhausted. The tavern had a dreary, forsaken look about it; and it was some time before any one appeared to notice his arrival. At length the mistress came into the bar-room, where the poor immigrant and his family sat looking at one another. "I guess you'll want some supper?" was the first question of the hostess; and, without waiting for a reply,

passed into the kitchen, and busied herself in the preparation of the meal. In the course of half an hour supper was announced, and the party sat down to a plentiful supply of fried potatoes, cold ham, bread and butter and tea. All the men about the house were at work in the harvest-field, and would be out late, hauling in the last of the grain. It was concluded, therefore, that nothing could be done that night, so they all retired to rest.

Early the next morning the weaver was stirring, and thought he might walk out a mile or two and have a look round before breakfast. It was a busy time with the farmers, and numbers were already at work cutting their grain. A few lots up from the tavern, John spied a fine new house, into which the owner appeared to be just moving. There was a neat picket fence round it; but the enclosure was white with lime, and full of confused heaps of lumber, stone, and dirt. It stood close to the lane leading from the main road, and the weaver—already feeling that this was a “free country” he had got into—decided to have a closer inspection of the premises. It struck him, in a shrewd way, that, perhaps, he might get a job here, if it was only to *redd* up things a little.

The land sloped somewhat abruptly down from the rear of the new building, and as he advanced along the lane, the hollow on the other side became visible, revealing several other buildings of a much humbler appearance, being what the weaver at once suspected, the original log-house, barn, and stables of the owner of the lot, a good-natured fellow of the name of Williamson, who, coming up the hill at the moment, and seeing a stranger in the lane, bid him “good morning,” and as breakfast was just then being announced by blast of long tin horn from the rear of the new establishment, John received an invitation to join in the morning meal, which he gladly accepted. In the conversation at table, he freely communicated his prospects and intentions. “He didna ken a great deal about the wark, but he was baith able and willin’ to learn, if he had only a bit house to gang into, and something to begin wi.” Williamson said nothing, but after breakfast he asked John to take a walk round the farm. It is with no small pride that the farmer shows off his land, especially when it is his own, and he can give you the history of its clearing. “There, where that old barn stands, he had chopped the first tree more’n 35 years ago; and that there old log-house, him and his wife did the raisin’ on it. Them *was* hard times, now I tell you.”

They went round the fields where the grain was cut down, looked at the root crops, the cattle, sheep, horses, and so on. The weaver was in raptures. It was a bonnie place. “An’ hae ye din a’ this yoursel’, na?”

“Well I guess I didn’t cut every stick you see in most of them there back fields, but I did my share of chopping the first ten years. Me and Reub Hall started to underbrush the same day—that’s Reub’s place, that there shanty crost the other side—well, you see, he haint much more’n a good tater patch about him. He’s a good

enough neighbour, is Reub, but you see how it is. I don't believe in a man loafing round them there taverns all the time. When a man has land to clear up, he's got to stick to it, that's so."

John understood enough of the above to venture the remark, "that there was an unco difference between him and his neebour, ony way."

Thinking it was now time to return to the tavern and see after his family, John was pleased to hear Williamson propose to accompany him, "and have a chat with the old woman." As they went along he made particular enquiries as to the weaver's capabilities and expectations. After seeing Mrs. Gilmour and the children, he told them he wanted to hire a man for the winter; and, if they could agree on the terms, he would let them have the use of the old house, which, with a little fixing up before the cold weather set in, would do very well for a start. He had intended it for a sheep-pen, or some such thing; but his flock would be no worse off than it had been before, and, perhaps, he would have time to fix up some other place.

From the end of harvest till the frost sets in there is always enough to do on a large farm in Canada; and the farmer who manages to get the most ploughing done in the fall has a better chance of a good seeding in the spring; and, generally speaking, an early seeding, with the ground in good order, is the best insurance against the early autumn frosts, which are a great plague in some new settlements. The farmer who has eighty or one hundred acres of clearing can spend every hour between the plough-handles from the end of harvest till the winter sets in; and it is well for him if he has boys to attend to the cattle and the root crops. Williamson had lots of ploughing to do, and wanted to commence at once, as he intended to try fall wheat this year. His oldest boy had cut his foot with the axe, and was laid up for a month at least. The rest of the youngsters—somewhat behind in their education—were anxious to go to school. So, if John Gilmour had no objection to hauling out manure, lifting and pitting potatoes and turnips, husking corn and feeding cattle, Williamson would give him a trial for a quarter, at a salary of ten dollars a month, with board for himself and the use of the old log-house for his family included. Small pay, it is true; but then he was only a "greenhorn," and did not know much about hard work.

John had the good sense to accept the offer. Always in speaking of his first set out, which was a favourite theme, he seldom omitted the remark, "Ma advice to a new-comer is, tae tak' haud o' the first thing that comes tae his haun'; because, ye see, he'll be learnin' a' the time."

This arrangement with Williamson settled the difficulty. Before noon they had taken possession of their new home. On his arrival at Toronto, John had talked the matter over with the emigration agent there, who directed him in the purchase of such articles of household economy as he deemed indispensable to the

kind of adventure which the weaver, owing to his straitened circumstances, was obliged to undertake. These, with the few things he had brought with him from Scotland, were left in the care of an acquaintance he had picked up on the road, and were to be sent to him on the first opportunity, so that they had no luggage with them but what they could carry in two or three good-sized parcels, with which they had footed it from where they had met this acquaintance, something like thirty miles.

Towards evening a few of the neighbours called in, and finding how things stood, set to work and knocked together a couple of rough deal bedsteads, two or three benches, a table, and a few other useful things. The Gilmours had been wise enough to bring a few bed clothes, and a couple of ticks with them, which, being filled with fresh oat straw from Williamson's barn, furnished them with good wholesome beds. As they had no stove, one of the neighbours offered to lend them his old camp oven, which came very handy, as there was a good fire-place in the house, and plenty of "chips" in the lane before the door, where the stove-wood had been chopped for the last twenty-five years. A few other necessary utensils were contributed by one and another of their visitors, and Mrs. Gilmour, having saved a little of her old country black tea, proposed a cup to the neighbours who had so kindly lent their assistance. Mrs. Williamson furnished the eatables. The weaver, in asking a blessing on the humble meal, did so with a feeling of gratitude in his heart which quite overcame him.

They had brought with them an assortment of little shawls, scarfs, and other articles of men and women's wear, which they shrewdly expected to be able to sell or trade away for other things they might require; and Mrs. Gilmour in a pleasant way intimated the fact at supper, and, of course, there was a general desire to see the goods, with which they were so pleased, that every one took something, agreeing to pay for the articles, some with one thing some with another.

One of the farmers took a fancy to Maggie, the oldest, a bonnie lassie almost woman-grown, and wished them to send her over in the morning to his "old woman," who would be glad to hire her. Another was willing to take Jamie, a lad of about fourteen years of age; so that there was only the mistress herself and the youngest, also, a boy, who might also have been taken off their hands, but they preferred that he should stay with his mother for a while.

Thus did the poor weaver commence his humble career; yet, humble as it was, he already began to feel that there was hope in it. Out-door labour, for a few weeks, felt irksome and fatiguing; but pure air and an abundance of wholesome food made him strong, and before his three months were up he got quite seasoned to the work.

Winter had now set in, when there was less to be done, except with the axe, which he had not yet learned to handle as a chopper, and, consequently, he might have to submit to work at reduced

wages. It was his intention to fit up a loom so soon as he could accomplish it; but the season was now too far advanced to do anything at it this year. By next fall, however, he hoped to be prepared, and would employ his long evenings during the winter in getting the loom and machinery ready. He therefore concluded to remain on with Williamson at a reduction of two dollars a month. If he was earning but little money, he felt satisfied that he was getting experience of the country, what money could not buy.

"I maun just pit up wi' it, for I'm only a 'prentice, and canna expect' to be a journeyman a' at ance."

John stuck to the good old Doric. "It was a' nonsense in the like o' him tryin' to speak proper." "I'm ower long a beginnin', an' wad only mak a cuddy o' mysel'."

If at home, with his old country notions, John had been told that all he would get to do in the winter in Canada would be to feed swine, his imagination might have suggested the picture of the prodigal son, with the probability that he too might have to fill his belly with the husks; and, in all likelihood, the thought of it might have helped to reconcile him to pease-brose and the treddle-hole for the remainder of his days. But the reality never suggested the idea. In fact, all he had to do with the pigs was to see that they had plenty of pease, now that they were being fattened for winter provision.

The pig is the subject of rather peculiar treatment in the backwoods. No attention whatever is bestowed on him until he appears deserving of it—that is, until it is seen that it will "pay" to turn him into pork. Up to this point he has to fight for his living the best way he can. His main dependence in summer is the grass on the road sides, while it lasts, which is not often after the first or second week in July, for both cattle and sheep must have their share. When this legitimate means of obtaining a livelihood fails, he has no other resource but thieving, at which he is a perfect adept; every hole and corner must be stopped or he will be in at the crops, but woe betide his ears if "Watch" or "Colley" sees him at these tricks. He has always the run of the fields after harvest, and generally makes a good thing out of that; but until then he has some hard days to put in. Sometimes he takes to the bush about this time, but whether for the purpose of hunting squirrels, or trying if there is anything in last year's beech-nuts, I never could find out. Let there be a good crop of pease, however, and a fair prospect of his profiting thereby in the matter of weight, he will soon be looked after. Williamson, having a heavy pea crop this fall, put up about a score of them, five or six for home consumption, and the rest for the market. These, to sell well, would have to be kept as long as they took on flesh, or as long as the feed lasted. They would then be killed, dressed, and allowed to freeze, in which condition they might be teamed out and sold, any time when the roads were good. Part of John Gilmour's duty, therefore, was to see that they had plenty to eat and drink. There were also two or three beef cattle to be got ready for the spring market. But besides

attending to the live stock, there was plenty to do in the barn, cleaning up and bagging grain, of which there were about 600 bushels to be teamed out during the winter, so that John had plenty to do; but the days were short, and he thought it far better than pitching the weary shuttle sixteen hours a day for fourteen shillings a week, with oatmeal and red herrings to breakfast and supper.

Before this his second engagement was completed, he had the chance offered him of going upon a bush lot close by, the terms being that he was to clear as much as he could of it, and for every acre cleared and fenced he was to receive five dollars, and have the use of the whole for ten years. Arrangements of this kind are common, though it seems hard that a man should have to clear up land and not have it of his own when all is done; still, in a good place, where it is all hard wood land, and not too heavily timbered, one who has no means of doing better, and knowing how to go about it, may get along pretty well. The object is to get as much as possible cleared the first three or four years, and then take all the good out of it that can be got. It answers best for those who have some trade which they can follow during part of the year. After sugar making, which completed his winter's engagement, John's obliging employer, or "boss," as we have it in Canada, gave him a day or two's assistance in cutting down, hauling, and preparing the logs for the raising of his house. This took about half a day; all the more immediate neighbours attended, and all it cost the weaver was a dinner. He had still the building to floor, roof, and finish up inside; but he could do a great part of this himself, and his promise to pay by the labours of his loom furnished him with the necessary material. In two or three weeks John had a house of his own, with a corner for his loom, and the prospect of plenty to do as soon as the sheep were shorn and the wool carded and spun. Meantime, he can be getting a few acres chopped for potatoes and a little wheat, and next fall, provided he has a good season at the loom, he may be able to hire a man for the winter, so as to push forward the work of clearing. "This spring will be pretty hard upon you, John Gilmour; but keep up your heart, you are stronger and manlier since you came to Canada; your boys have a better prospect before them than they could have had in Paisley; and in a few years, if you are spared, you will have a place of your own, and they will help you to clear it." "I houp so," was John's reply, and I may just add, that he was not disappointed.

To some people, an enterprise approaching in similarity to that of our old friend Corning would be considered as deservedly entitled to the epithet "romantic," if undertaken by a man of means; and yet, under the very different auspices that it might be attempted in these days of roads, railways, mills, and markets everywhere, with a tide of immigration sweeping over the country, soon to reach the most distant points, there will always be those hardy spirits not

afraid to venture in the van of settlement. A pioneer capitalist is not often to be met with, however, unless indeed some speculative native, who knows pretty well what he is about. For a *gentleman* to build up an estate in the far distant woods might be a questionable proceeding, although the thing has been done over and over again, and with much better success than in Mrs. Moodie's time. It is all romantic nonsense, of course, to talk of "entering upon a new career in the grand old forests of the New World, of living alone with nature, learning her secrets, finding tongues in trees," &c., &c. That inspiration does not hold out, except in very rare instances. It would make all the difference in the world in the case of one who knew what he was doing, and had sufficient experience of the country. If his selection of a place was a good one, he would very soon turn it to account. Nor, let him go ever so far away, would he have to wait long for others to follow; for, under the Homestead Act, it is supposed that the country round is free to actual settlers. In a few years he might have a flourishing settlement about him. He would have the shrewdness to see that the land had water-privileges on it, in which case he would have the first grist and saw mill erected; the carding mill would soon follow, so would the tavern, the store, the post office, the church, the school, the township and county municipalities, in which, as councilman, reeve, or warden, he might possibly graduate in time for the honourable position of parliamentary representative; although, if bent only on making money, he would know enough to avoid the honour as much as possible. If inconvenient for our capitalist to superintend personally the first operations of clearing, he would find a reliable man to undertake the work for him, who, with a number of hands, say from ten to fifteen, all of them accustomed to lumbering, and working under a foreman, would proceed to the location in the month of September, taking with them from the nearest depot their winter's supply of flour, pork, and tea. After putting up their shanty, they would commence at once to underbrush, that is, cut out all the saplings, so as not to interfere with the regular work of chopping, which would thereafter be their constant employment during the winter, in spite of the snow. Next summer would be fully occupied burning, logging, cleaning up, and fencing the fallow, which ought to be a pretty good-sized one, not less than 200 acres, if they had been all the time chopping from the 1st of October to the 1st of May. It is to be taken into account that the ashes of the burnt-up log-heaps have all been gathered and stored away in a house built for the purpose, and if this is followed up by making of potash, men accustomed to the business will have to be found to attend to it. It will be well worth the trouble. As to the expense of the undertaking, the easiest calculation is to set it down at a cost of 20 dollars an acre, or 4000 dollars for the 200 acres, which is from three to five dollars an acre, more than it would be in a comparatively settled locality, where the same work could be got done by letting it out in small contracts to the settlers, always open to such, as a means of obtaining



a little ready money; but not in the same time, so that what would be a gain in one way, would be a loss in another, that is if time were an object. The cost of the land, varying from one to five dollars an acre, has to be added; and, say the capitalist had bought a 1000 acres at the latter price, his outlay will amount to 9000 dollars, to which, if he intends living on the place, add another 1000 for buildings. But the man who has all this money would be likely to see, after the spending of it himself, in which case he would have to put up a house at first, and "rough it" with his family, as best he could for a while.

But to proceed with a case in actual life, one in which the conditions are not a little different from the above, by which the adventure of a pioneer capitalist of the present day is contrasted with what it used to be.

The Raymonds were a family of the middle rank from the north of Ireland, consisting of a widow, two sons, and a daughter. They came to the settlement shortly after the Gilmours, and now occupy the two lots adjoining them. The eldest son, James, was about twenty-five years of age when I first saw him, a quiet observant fellow, who kept his own counsel, and seemed more anxious to hear than to speak. He came alone, looking for work, representing himself as a stranger, ignorant of the ways of the country, but willing to do anything, and learn the work. It was the spring of the year, and he soon found employment. A keen Yorkshire man saw a good chance of making something out of him, and hired him for six months. During this period of voluntary servitude he picked up a great deal of useful experience and information. He learned to be a good judge of land, and how to proceed in the event of his purchasing a lot of his own. At length he found land to suit him, and then we learned, for the first time, that his mother and the rest of the family were residing in a village some forty miles distant, where they had settled on first coming to the country, and where the old lady, assisted by her daughter, had commenced a private school for instruction in the ordinary branches, along with plain and fancy sewing. This had enabled them not to break upon their capital, which amounted to about one thousand pounds sterling.

It was the middle of September when young Raymond completed his engagement with the Yorkshire man, and by this time he had bought his land, a lot of two hundred acres, for which he paid, cash down, the sum of fourteen hundred dollars. Property was getting to be worth something at Corning's Mills.

He had also let out the chopping and clearing up of three acres, where he intended to build a house. This cost him about fifty dollars, and he contracted to have the house put up and finished by the first of December. It was a frame, enclosed with two-inch hemlock planks, and weather-boarded with half-inch pine. It measured 30 x 25 feet, and had a summer kitchen in the rear, and an underground cellar, with stone walls, on which the building rested. It was divided into six apartments—a large parlour, which would

have to be a sort of kitchen in winter, another smaller parlour, a dining-room, and three small bedrooms,—a very convenient, snug little house, when plastered in the inside, but this would have to be put off till next year. The whole was to cost something like five hundred dollars.

Everything being ready about the time sleighing commenced, Raymond hired a couple of teams, and set out to bring home his mother and sister, the younger brother remaining in the village, where he had got a situation as clerk in a store. In a few days they all arrived in safety—the old lady, very proud of her son's achievement, as well she might, for he had acted an uncommonly prudent part.

Towards the latter end of October, when the framers were busy at the house, and the clearing of the three acres above mentioned was completed, he let out the chopping of other twenty acres to two separate parties, five acres of each contract to be ready and under fence by the 15th of May, in time for spring crops, and the balance not later than the 15th of September, in time for fall wheat. This was to cost sixteen dollars an acre. The whole was now underbrushed, and some of it cut. While the work was progressing, Raymond himself was not idle. He hired a man at fourteen dollars a month, with board, and set to work to put up a temporary shed for a cow, and a yoke of oxen which he had bought. He then went and hauled out a number of saw-logs, which he took to the mill and had cut on shares. By this means he obtained, without any direct outlay, as much lumber as did for a large frame barn, to be raised the following summer, and had several thousand feet to sell. The choppers were glad to get rid of the hemlock, as it is hard to burn, and it so happened that there were lots of it on the twenty acres that were being cleared, which saved Raymond the trouble of cutting it down elsewhere. Its abundance, at the same time, enabled him to furnish the tannery with some thirty or forty cords of the bark at one dollar per cord. Another important part of his winter's work was to haul out an immense pile of the best maple logs from the fallow, which he set his hired man to cut up for firewood. Part of this was piled up for the use of the house, and the remainder sold to the school trustees at ninety cents a cord of 128 cubic feet, the measurement by which firewood is bought and sold both in Canada and the United States. Each stick is four feet in length—if from a log over ten inches in diameter it has to be split; the pile is four feet high, by eight feet long, when measured in single cords, but if in large quantities the three dimensions are multiplied together, and the product divided by 128, which gives the number of cords. In the country they are not so particular about piling; but in the cities, where the cord is often worth six dollars, the seller takes good care to make it *bulk* as much as possible. Poor settlers have generally a very thriftless way of attending to the wants of the cooking-stove; the usual method being to haul a few green logs to the chip-pile before the door, and cut up a little every day; but the

introduction of sawing machines, driven by horse-power, is now becoming general, and by their means a whole year's wood can be cut in a day, and when well seasoned it is a great benefit to the cook, and takes less to keep a good fire going.

Besides the work above mentioned, Raymond managed, before the winter was over, to take out and square the logs required for the frame barn and stable, which he intended to raise the following summer. The timber used for this purpose is generally elm, and the tallest and straightest trees, not over 18 inches in diameter, are selected. The squaring is done with the "broad-axe," in the same manner that they prepare timber for exportation. After this operation, the logs are ready for the framer, whose business it is to "lay out" the building, and he must be very careful, with his measurements and cuttings so that everything goes "slick" at the raising. It is a business not requiring a great amount of ingenuity, and being followed during only a part of the year, has helped many a poor man both to clear and pay for his farm. Very little difficulty would be felt in obtaining the services of a framer, as they are pretty numerous in the backwoods.

At length the snow went away, the spring was early and dry, and before the time stipulated the contracting choppers had their ten acres ready for the seed. With the exception of a small turnip and potato patch next to the three acres first cleared, the whole was included in one field, and sown with spring wheat, seeded down with grass at the same time. This is the usual practice when it is intended not to crop the field for a few years, until the stumps begin to soften, and the roots die away, so that the plough has a chance to get through. The grass keeps out the weeds, and being perennial, yields good hay as long as you please, with no other trouble than that of cutting and curing. It was Raymond's idea to go on chopping 20 acres a year for five or six years, always seeding down with the first crop, by the end of which time he would be able to break up the first field chopped; next year, the next, and so on. Although, as a general thing, the first crop (not to speak of the hay afterwards) pays for the clearing, it is a course which can hardly be adopted but by those who have a little capital, and to such it is a pleasant way of clearing up a farm; besides, by going into stock-raising, as Raymond intended to do, it could be made profitable as well as pleasant.

In sowing new land, the seed is scattered on the ground just as the fire leaves it. The stumps of the burned up trees are still there, all black and charred, and the roots are down deep in the virgin loam. The "dragging" in of the seed is accomplished by means of an implement shaped like the letter-V with short harrow teeth along the arms, its peculiar construction enabling it to steer through the maze of stumps without coming in contact with them. A quiet horse is better for dragging than oxen, as they are too slow, and it takes a tremendous running up and down to cover the seed by means of the V drag. Raymond took great pains with the first ten acres,

sowed it, borrowed a horse, and harrowed it himself. Meantime, in preparation for plastering the house, his man was hauling sand and lime which had been burnt on a log heap in the fallow. These jobs accomplished, he went to work and hauled his lumber from the mill, piling it in readiness for the barn, which would soon be ready to raise. He also made a garden, by stumping half an acre, and enclosing it with a neat picket fence—no light undertaking when the stumps are large and green, for they have then to be dug out, and the roots cut with the axe; but Raymond was a fellow that never stuck at anything he commenced, and he was determined to have a garden.

And now came the raising of the barn and stables; but having occasion in the sequel to describe buildings of a similar character, I shall only observe that they were fitted up with every convenience, and were as large and convenient as the best in the back townships usually are. Up to this point their expenses had been :—

For Price of Land, - - - - -	\$1400
„ Building House, - - - - -	500
„ Yoke of Oxen, - - - - -	80
„ Two Cows, - - - - -	35
„ Clearing Three Acres, - - - - -	60
„ „ Twenty Acres, - - - - -	320
„ Frame Barn and Stables, - - - - -	300
„ Hired man for six months, - - - - -	84
„ House expenses for six months, - - - - -	200
„ School and County Tax, six months, - - - - -	20
„ Sundries, - - - - -	100
Total, - - - - -	<u>\$3099</u>

To meet their future expenses they had still a cash capital of about 2000 dollars, which could readily enough be invested in small loans to the farmers round on the very best security, and this is actually what was done. It was no extravagant calculation to make, that the first crop of wheat would pay for the clearing. Twenty bushels to the acre on new land is far from being a large crop, and at one dollar a bushel, the proceeds of 20 acres would be 400 dollars; but Raymond meant not only to make the first crop pay for the clearing, but to make it keep the house in flour. He would be careful in the choice of seed, careful in dragging it in, in harvesting and threshing it; and at the same time, by working in the fallow himself, either at chopping or logging, he hoped to reduce the cost of clearing considerably.

I need scarcely assure my readers that the Raymonds got on well in Canada, for they seemed to fall into the ways of the country, and do the right thing from the very beginning.

Of all the settlers who accompanied or followed immediately in the wake of the old trapper Corning, Daddy Gates is one of the few who remain unto this day. His extraction is somewhat doubtful,

having to be traced through a Dutch-American source; but Dad himself was never very clear on the subject, and did not think it of much consequence to him what or who his grandfather had been. He knew, at least, that he was the son of a pioneer, for he had helped his father to clear part of a poor farm on the River St. John, New Brunswick. Hard work it was getting the close spruce timber off, and raising a few oats; but for the lumbering to be had in that region they could not have lived. Corning's Mills, with all its disadvantages, was a paradise to the banks of the St. John; its hardwood land could be cleared and crops worth the raising obtained from it. Simon Gates was therefore one of the most contented and prosperous of our early pioneers, well pleased with himself and his 200 acres within a mile from the grist mill. This circumstance, added to his experience of the woods and the life therein, although the conditions were not a little different from those to which he had been accustomed in his youth, accounts in some measure for the fact of his being found in possession of the same property on which he originally settled some thirty or forty years ago. For, unfortunately, it has to be admitted, not for the first time, that the pioneer is not always to be found on the lot which he originally occupied and cleared. It would seem that the qualities which constitute fitness for enduring the hardship and privation of roughing it in the bush are not in every instance associated with those which give stability and success in a more advanced state of the country. Any one strong and "ignorant enough," as Daddy Gates used to say, can clear up land, and especially at this time of day. It was different forty years ago, when settlers were few and far between, when there was neither roads nor railways, when people had to grind their wheat in a coffee mill, and perhaps not see the inside of a store in two years. It is when the land is cleared up, and a new order of things commences, that the difficulty with a good many begins. However strange it may seem, it is nevertheless a fact, that numbers of our pioneers, through sheer carelessness and ignorance, have doomed themselves to a fate similar to that which overtook the old emigrants from the banks of the Nile—to toil, but never to enter in!—to be near the fulfilment of their early dreams, and yet fail to realize the easy future to which their efforts have all been directed. It is one thing to clear land, and quite another to farm it afterwards. When the backwoodsman lays down his axe and takes to the plough, if he has not been preparing himself by study and observation for the change, very likely he will have to shoulder it again, move further back into the bush and hope for better luck next time, as not a few of our first settlers at Corning's Mills had been obliged to do. But such is pioneer life; and while in this aspect it is to be regretted in its effects upon individuals and families, it eventually ministers to the general good, preparing the way, as it does, for others sure to follow, who with new life and better skill, soon begin to make things look different. Generally speaking, the pioneer of the unlucky stamp referred to is a nomad by profession, and can hardly do any better,

for his knowledge and experience are limited to the requirements of a very elementary state of existence. It has been maintained by some of our most prominent men that the native Canadian makes the only reliable pioneer, and that the immigrant who undertakes the task of settling down in the wilderness without any knowledge of the country, or experience of the work he has to perform, runs a very great risk of failure. A few years ago, the question was incidentally discussed in our own Parliament. Thomas D'Arcy McGee, at that time Minister of Agriculture and Emigration, upheld the argument in behalf of the immigrant, against the then Provincial Secretary, who was all for the native-born backwoodsman, although, at the time, representing a county which had actually been opened up, and to a large extent settled, by Paisley weavers.

There is no question but the native, familiar with the ways of the country, inured to the climate, and accustomed to the use of the axe, has at the *first start* the advantage of the raw immigrant; but, in the end, all depends on the man. If the immigrant would only take time, and be content to learn for a while, he has nothing whatever to fear; and with all due deference to the opinions of our *quondam* Provincial Secretary, and others of the same belief, I hold that the immigrant is as likely to succeed, and accommodate himself to every change in the backwoods life, as the native. At his first outset, however, he has no right to go in the very van of settlement; he should be content to work his way to some such incipient village as the one I have been describing, of which there is now any number in the back townships, and there, taking hold of the first thing in the shape of work that offers itself, wait patiently till his ideas have somewhat expanded;—this is, of course, on the supposition that his means are very limited.

But to proceed with our sketch: Simon Gates has been a successful pioneer, and is to be regarded as a fair type of his class. I might have selected a higher, but prefer that which approaches the average. Paying him a visit, we come to the lane running off the road, or concession line, as it is called, and away down the clearing like a main artery, into which the fields open at intervals by means of sliding bars resting on posts, and pour forth their contributions in hay-time and harvest, to be conveyed to the common storehouse, a vast wooden barn standing in from the lane a little, and not far from the road first mentioned. Entering the lane by a small side gate, hung on the same post which supports the main gate, we pass along, on the left, a neat picket fence, enclosing on this side the kitchen garden, famous all over the settlement for its currant bushes, cabbages, beets, and onions. The more delicate tomatoes, mush-melons, and citrons have been tried, but as yet only with partial success, owing to the rather troublesome fall-frosts; although Daddy Gates—who is something of a gardener—thinks that as the climate improves, on the clearing up and settlement of the country, he will be able to succeed. At the farther end of this picket enclosure stands the house—not the original one—for that was only a shanty, roofed with elm bark,

answering well enough for two or three years at first, when the family was small. The present habitation is not a very wonderful improvement, and cannot be said to surpass the common run of first houses in an ordinary settlement of the present day. After all it is not so bad-looking; and, with an occasional whitewash and a little plastering up of the "cracks" in the fall of the year, it may do the old people quite a while yet;—although, ever since Steve Foster and one or two other neighbours have got their nice new "frames" up, the young Gates are all the time teasing "Pap" about building, which year after year he has put off, waiting for better times. As the house stands in from the lane some ten yards or so, we turn round the garden fence, where another similar fence commences, and is continued in front of the house for a little space; then turning at right angles, joins that of the lane, which is of the common zig-zag description. In the centre of this picket is a small gate, opening upon a narrow plank footpath, extending to the verandah or "stoup," the more common Dutch name for it, which is a pavement about five feet wide, running along the front of the house, boarded in at both ends, as well as partly in front—thus forming, with the roof continued in a line with that covering the main building, an enclosure, in which, for want of a summer kitchen, stands the cooking-stove in warm weather. The house itself, resting on the stone walls of an underground cellar, is built of logs, and measures 26 by 22 feet. The main apartment, opening from the stoup by a door right in the centre, occupies the whole area, all but a narrow stripe at one end, partitioned off into two very small bed-rooms. The garret above has never been fitted up in any way. It has a small window in each gable, and is lined lengthways on both sides with bedsteads like a small hospital. Here the sleepers next the wall have to be careful in rising, to avoid unpleasant contact with the bare rafters; and here, on a wet night, when their "chores" are all done up, they may retire a little earlier to enjoy the rapture of "rain on the roof."

"Every tingle on the shingle
Has an echo in the heart,
And a thousand dreamy fancies
Into busy being start,
And a thousand recollections
Weave their bright hues into woof,
As we listen to the patter
Of the soft rain on the roof."

Such is the simple mansion in which the Gates have lived for more than thirty years. The rule that "the domestic circumstances of men form a second physiognomy, which supplies a key to their character and destiny," holds good in their case at least—they are very plain people indeed. Knocking at the door, we are told to come in. Mrs. Gates, a benign old lady of few words, remarkable for their point and deliberation, thinks it unnecessary to rise from her knitting in the large-armed rocking-chair, but, in a kindly way, bids us take a seat. "Help yourself" is the motto of the backwoods, so we don't

feel the least awkward in hunting up a chair. There is an enormous log-fire roaring up the chimney, and a cooking-stove besides, standing like a family altar in the middle of the apartment. The stovepipe, rising straight up, passes through a hole in the ceiling, then up through the garret, and out by another hole in the ridge of the roof. No fear of sparks setting fire to the house at this time of the year, for there is a good solid coating of snow on the shingles; but if Pap does not run the pipe into the chimney soon, there is no saying what may happen in the very dry weather, now that the shingles are so old.

We observe that Mrs. Gates and her two daughters, Mary Jane and Elizabeth Ann are dressed in good substantial "Rob Roy," their own dyeing and spinning—twenty fleece, more or less, having been sent to the carding mill last summer, returning in "rolls" ready for the wheel, which was kept pretty busy for a month or two after harvest. The yarn was then dyed and sent to the weaver. Mrs. Gates prides herself on the quantity and quality of her homespun, and nothing better adapted to the climate or the occupation of the people could well be imagined. If they could only dye a little better, these old women, it would be hard to beat them in the manufacture of clothing. For ordinary wear the men have jackets or smocks, and sometimes trousers, made of the stuff as it comes from the loom; but for holiday use and travelling, their suits are made of cloth fulled and dressed at the mill where the carding was done.

Mary Jane is busy "getting the dinner." She is just emerging from a trap-door in the floor of the room, which, in winter, is the only entrance to the cellar, with a large plate in her hand, heaped up with slices of very nice bacon, which, by dint of a good arm and a sharp butcher's knife, she has managed to cut from one of the hard flitches down in the cellar. The meat, after soaking a few minutes—first in hot, then in cold water—is put into the capacious frying-pan. A furious sputter ensues. But let no one imagine that his olfactory nerves, as he sits besides the cooking-stove, will be propitiated with anything like an apology. Coming in from the keen January air, he does not feel it at all necessary. All that the case demands is a little more exertion of the lungs in speaking.

A stranger would be likely to declare that the Canadian backwoodsman was a dreadfully porkivorous being. The Gates, on an average, must have ate six fat hogs annually—say for the last twenty years. But then there are seven of them; and we have to take into account the "bees," chopping, logging, quilting, woolpicking, and thrashing, besides the extra hands in haying and harvest. It is in winter that the greatest quantity of pork is consumed; and people may say what they like about the pig, but let them swing the axe for nine hours a day, inhaling the pure oxygen of the woods at a temperature below zero, and if their lungs can stand the internal combustion without the carbon of fat pork for fuel, they have a good right to speak. It must not be supposed, however, that it is pig, and nothing but pig, all the year round. On the contrary, beef and mutton are by no means rare; besides, almost every one has a flock of geese

and turkeys—ducks are not so common, but there is no end to chickens.

While Mary Ann is at the door, blowing the long tin-horn to call the men to dinner, let us take a look at the bill of fare.

In the centre of the table, which is covered with tolerable linen, stands the dish of fried bacon, along with another containing an immense "chunk" of the same meat boiled and cold; the potatoes are drying in the oven, and will not be put on the table till the men sit down. Even at dinner we fail not to observe the everlasting cups and saucers—swills of young Hyson, generally without sugar, forming part of every meal; doubtless, with so much fat pork, it is found to be a better solvent than cold water. Then there is an abundance of good home-baked bread, one or two varieties of cake, a pumpkin-pie, "apple sass" seasoned with allspice, pickled beets, and raw onions.

The thrifty Canadian housewife has always a reserve of dried fruit for winter use. Wild strawberries, raspberries, and other small fruit grow in prodigious quantities in every old clearing, fence-corner, or wherever there is an open space not otherwise occupied. These are gathered in their proper season, generally by the young folks, and when dried in the sun on boards, or in the oven in pans, are carefully laid past in jars. All they require to prepare them for the table is a little sugar and boiling water. Other larger fruits, and some vegetables, pumpkins for instance, are dried in a similar way.

But here are the men, Pap and his three sons, named respectively Pete, Hen, and Gust, or duly, Peter, Henry, and Augustus. Pap has a thoughtful look in his face, and is now a little stooped in the shoulders, for "he has seen some hard times, has Pap." The boys are fine, brawny, sensible-looking fellows, in the prime of their youth and strength, free and erect, not afraid to look you straight in the face. They have been in the bush since morning chopping, and so every day for the last two months, for they are going to add ten acres to the clearing this next spring. We shall see them at work in a little.

Shortly after dinner, of which we have been cordially invited to partake, we are brought to see the barn and barn-yard on the other side of the lane, and down from the house a little. The barn, like the house, stands in from the lane a few yards to allow the teams to turn, and the gin of the threshing machine to operate. It is an enormous frame building, 66 x 46 feet, and 25 feet from floor to ridge. In the side are two great folding doors, admitting the largest loads of hay and grain, for everything is housed if possible. We enter upon the floor, which is some 20 feet wide, roomy enough to hold the threshing machine when it comes round, and to admit of a little handwork if required for an early grist, or any odd job. To the right of the floor is the "mow," occupying three-fifths of the whole building from basement to ceiling, and capable of holding a whole harvest. Here the wheat in the sheaf is stowed. Oats,

barley, and buckwheat are piled on the loft above the floor. On the left, opposite the mow, are the granaries, six in number, each with a capacity for holding 150 bushels. Next to the granaries, and at the end of the building, is a very commodious horse stable, with four double stalls and two single ones; the principal entrance is from the barn-yard, but there is also a narrow passage communicating with the floor. Above both stable and granaries is the hay loft, extending to the ceiling, with an opening above the rack of each stall. Doors similar to those by which we first entered, and directly opposite, open into the barn-yard, so that the teams hauling in grain or hay enter at one side and pass out at the other.

The frame barn, of which the above is an ordinary type, is not often the first in use by the settler. For a few years at first he has to be content with one built of logs, not quite so large, and generally wanting both the stable and the granaries, but otherwise the same in construction; all the outlay required being merely for the shingles, nails, and a few hundred feet of lumber. It is always within the reach of the poorest settler, who has only to cut the logs and haul them together, the neighbours never refusing to give him half a day to raise it. The frame barn is a different matter, and can never be undertaken without a little means. It has to be "laid out" by a regular framer, who gets about a dollar and a-half a day with board, or is paid so much for the job. But the farmer himself, with good assistance at home, can do a great part of it himself, nearly all, in fact, after the frame is once up. He may take his logs to the mill and trade them for sawn lumber; he may even make his own shingles, and then have only the nails to buy. Some commence their preparations two years or so before raising, and in this way do not feel the burden.

We now pass into the barn-yard, enclosed on one side by the barn just described. Two other sides are likewise enclosed by buildings cornering at right angles with the barn, one of them being a long cattle-shed with a hay-loft above, having two or three dumb windows on the inside for throwing out feed to the cattle, the other being the old barn and stable, now used as a retreat by the cattle and sheep, which have no other protection from the storms of winter. The side looking to the south is only partly enclosed by what remains of an immense straw stack, piled up on a frame of logs at the threshing last fall. This straw, along with a "bottle" of hay morning and evening, a handful of salt now and then, with plenty of pure sweet spring water from the creek hard by, is all that Mr. Gates allows his cattle in winter. There are many warm nooks and corners about such a barn-yard, no doubt; but it may well be supposed that even bovine patience gets tired of it before the long winter is over, and that even the "leeks," a week or two after the snow melts, are a welcome sight after five months' "storm feeding."

The sheep and pigs have the pea-straw in addition, which is not too carefully threshed; the former nibble away at the leaves, the latter pick out the last pea in the heap, and then build a nest with

the straw, all in tolerable good humour, until it comes to the point of deciding which have to lie outside.

With the exception of the horses, Mr. Gates' stock is very little better than storm-fed. He has an idea, very common in the backwoods, that it makes the cattle hardy when they have to winter out. But see the poor animals in the spring, you can count every bone in their body, and it is far on in the summer before they begin to look like themselves. The settler often loses a whole year by his oxen "giving out" in the spring, from not being sheltered and cared for during the winter. Our friend Gates' stock includes some six or seven cows, three or four heifers, a yoke of oxen well broken in, some young steers that will soon be able to work, two span of horses, two or three colts, some twenty or thirty sheep, and any quantity of pigs and poultry. In every instance, however, the breed is inferior, for no attempt has ever been made to improve it. Mr. Gates is not one of your model farmers; his motto is to "git along" in a tolerable way. He has never got the length of a root-house yet, and he could easily have spared a few acres for root crops; but this year he had only a small turnip patch, and about three-quarters of an acre of potatoes. The turnips never were lifted, for, when the feed got scarce in the fall, the cattle were turned into the field, and before the crop was half used the frost set in. The potatoes were pitted in the field where they grew, away at the end of the clearing, and when the few that were first brought home to the kitchen cellar were used, the family had to do without them till the pits could be opened. The prudent farmer sets a high value on his root-house; and, by having it well stocked in the fall, provided he has anything like good stable accommodation, he need not be afraid of the hardest winter; besides, with very little extra trouble, he may have some beef cattle fatted for the spring market. Some have their root-houses under the barn in the form of an underground cellar, with stone walls, on which the whole building rests. This is a very good plan. Others excavate the side of a knoll or embankment, where the land near the stable affords the like; but Mr. Gates, although his buildings were situate on an elevation, shelving off towards a creek which ran through his property, and every way adapted for such a purpose, had either never thought of it, or set it down as one of those things that "don't pay," a common saying in the backwoods, but very often used in ignorance, and to cloak a want of spirit and enterprise.

By the way, one of the finest things on the Gates' property was the never-failing spring creek above alluded to, running through the whole of the clearing, as well as the rear bush part of the lot. It was a "bonnie burn," ever crooning to the cedars that dipped their fingers in its pearly waters, and might have been a great deal more to its owners than "a fine thing for cattle." One would have almost imagined that they bore a sort of grudge against it. Had it been content with anything like reasonable bounds or walked peaceably along in a straight line, there might have been less said; but

like a young romp it would have its own way, regardless of how much land it broke up in its frolics. This was nothing, however, to one of its cantrips; for, just as it cleared the back hundred, a short distance from the rear concession line, it jumped laughing over a precipice 20 feet high, turning the water-wheel of a small carding and fulling mill, the rent of which built Steve Foster's frame house, and helped to pay for the land.

The barn and barn-yard are all the sights about the place at this time of the year, unless we go down to the fallow with the boys and see the chopping. They are well on with their ten acres, so we can have an idea of what they have been doing during the last two months; and it will be worth while to see them handle the axe, for they can do it to perfection.

As we get to about the end of the clearing, we notice that the land rises into little rounded knolls, and on approaching the fallow from the lane, the creek, which has hitherto pursued a very devious course, is observed to split into two, as if to clasp in its embrace one of the largest knolls, which it does so completely as to form a perfect island, the scene of the winter's chopping—now, however, only a few trees are left standing along the side next the road; the rest of the timber lies strewn around, apparently in the utmost confusion, among heaps of brush and small limbs; but the initiated would not fail to observe a certain method in the midst of all the disorder, for the experienced chopper having always a good notion of the conditions essential to a first-rate "burn," lays his timber accordingly. The brush heaps are piled with the same end in view. Forest trees, from being so close together, do not branch out on the stems, but make amends, in the abundant ramification of the top, where there is no restraint. On being chopped they come to the ground with tremendous force, when the trunk is cut into convenient lengths for logging, and the top, which is often smashed to pieces in the fall, is dressed; that is, the unbroken limbs and stumps of limbs are cut off, and, with the loose fragments lying around, are piled close together, so as to burn well.

Having disposed of the few small hemlocks along the stream, there is nothing left standing on the island but the stumps, and one enormous rock elm right in the centre, left to the last, in expectation, perhaps, that when deprived of the support and shelter of its neighbours, some vigorous nor'-wester might be kind enough to take it down, and save two or three hours' hard work chopping, for the monster is fully five feet at the butt.

"Since he has stood so long, why not let him alone, to ornament the island?"

But the boys know better.

"He's got to come down, and if he don't come now, he may when we don't want him."

"I guess," says another of the boys, "he won't be no great job neither, for I bet you he's as hollow's a drum." So, agreeing where he is to "lay," they set themselves to chop it down, one opposite the



other on the same side, and thus one right and the other left handed. It is soon seen that Gust was not far wrong in his estimate—fair and stately as the giant seemed outside, he was as rotten as a mushroom at the core. There is still a good shell of wood, however, sufficient to keep the axes going a good half hour at least; no! not so long, the leviathan leans a little a-top, and needs all his mind to keep him perpendicular. Suddenly the choppers cease, certain sure signs, plain enough to them, betoken the end. Still, there is no hurry; the boys have calculated where he is to “lay,” and retire leisurely from the butt to enjoy the sight—for it is a sight, even to the backwoodsman accustomed to it. How calmly he bends his lordly head! Down!—down!—the mighty has fallen! What a crash! Broken in the back, shivered in every limb, his plunge in the fallow has tossed up a thick spray of brush high into the air. Gust remarks, with some philosophy, that it is “much easier to take a tree down than to put one up.”

There is not a great deal of danger from the falling of the trees in an ordinary way, as there is always time to get away from the butt to a safe distance, but one has to be careful of loose limbs dropping down from above. A certain excitement attaches to chopping which does not belong to ordinary dull labour; and, consequently, a good axemen prefers it to almost any other kind of work—in the winter at least. It is too warm work for summer, otherwise it would be the better time, as the wood is much softer, and the foliage—although it would greatly obstruct the chopper—would be of considerable service in burning up the loose stuff preparatory to logging. A good hand will often cut an acre in a week, and earn from six to seven dollars, with board; but, as before mentioned, it is more usual to have the chopping done by contract.

“Forest management” in some older countries is reduced to a system, in which the policy is strictly conservative; but with us in the backwoods—and indeed through nearly the whole of Canada—it consists in stupid extermination. The doom of every standing stick, with the exception of the sugar-bush and the cordwood reserve, is to be cut down and cast into the fire. A stranger is struck with the monotonous appearance of the country. Walking along a concession line, not a tree relieves the eye, except the uniform belt of woods in the rear of the clearings. How much better it would be to have the house and outbuildings surrounded by a grove, as well as a few trees scattered over the fields or in the fence corners, which would not only be an ornament to the landscape, but serve as a screen from the scorching heat of summer, and a wind-break to the cold sweeping blasts of winter.

If there was not a difficulty in the way of reserving odd timber here and there, the wholesale system of destruction practised would indicate an amount of ignorance and bad taste truly lamentable. But there is a difficulty; and the poor settler, struggling to make a living, has very little inclination to grapple with it. In the first place, only a few forest trees, when left standing alone, will bear exposure to any

strong blast of wind, unless they have had time to take firmer hold of the ground, which will not be until they have had a few shakings in their unprotected state. Then, in order to preserve a clump or grove, the greatest care has to be taken to prevent the fire getting near it. The leaves and the brush have all to be removed to a distance, and the fallow burned in patches, which involves much additional labour; for it is a great object to get a "good burn," and the driest time, with a favourable wind being chosen, there is often a perfect tornado of fire, which licks up everything except the heavy logs.

But the difficulty ought to be nothing to one who is in any position at all to grapple with it. He might proceed in this way:—Commencing midway on the front of his lot, let him open up a lane of two or three hundred yards in length by fifteen in breadth. At a convenient point on one side, where he intends to build his house, let him thin out the trees less capable of becoming shady and ornamental to any extent he may think proper; the same on the other side, where he intends to raise the barn and stables. Also, along both sides of the lane, from its commencement on the road, let him thin out, in the same way, a strip of some ten or twelve yards in width. And now he is to proceed with his regular chopping. Commencing at the front, on one side of the lane, he cuts everything clean down to the thinned-out portion where the house is to stand, making a field of, say five acres. If he can manage to have the same thing done on the other side of the lane all the better. Let him now watch his opportunity, and burn the brush heaps in both fallows, selecting not too dry a time. This done, he must go to work and remove the brush heaps from the lane, and the thinned-out portions into the fallows on each side, where there will now be more room to move about. A second fire completes the burning up of the loose stuff. The next operation will be the logging and burning of the heavy timber in each of the fallows, including that of the lane and the thinnings.

In this way, throughout the whole clearing, there might be reserves of shade and ornamental trees; and the lane, with its sheltering belt of woods, might be extended to the rear of the lot. In a few years it would be a delightful avenue.

Mr. Gates' lot is a two hundred acre one, and when this winter's chopping is through he will have 120 acres of a clearing. Fifty acres of the balance, fronting the concession in the rear, now belong to one of the boys, who has a small clearing on it. He is going to put a house up, and get some one to keep it for him soon. Pap will not clear any more on his side for some time to come;—indeed, he has more land now than he can attend to. Towards the front the fields are entirely free of stumps; and in a few years there will be 100 acres in a stretch, having the appearance of an old farm. One would think that, having no debts to speak of, no rent to pay, Pap might be a rich man; but rich man and poor farmer don't usually go together. Our friend has been in the habit of treating his land much in the same way as he treats his cattle—takes all he can get, and gives

as little as he can. That fields as well as cattle require to be fed, and their food regulated to their wants and uses, savours too much of book-farming to have much weight with Pap. Another man with the same industry and a little more chemistry could hardly help making a small fortune on such a farm.

"February fill the dyke," is a true proverb in Canada. The last of the winter months with us, it is perhaps not so cold as January, but it is more stormy as a general thing. The snow has gathered to a depth of from two to three feet on the level, and what now falls is mostly drifted, filling up the numerous lanes, and sometimes the main roads fence high. Chopping is carried on at a great disadvantage. In fact, from the beginning of the month, on till sugar-making, there is not much out-door work done in the back townships. The settler who is just commencing operations, and has to do all his own chopping and clearing up, will have as much of a fallow cut as he can well attend to in the spring and fore part of the summer. He has leisure now, if he has the ingenuity to do a great many little jobs by the fire-side that will save both time and money afterwards. The man who has worked himself into easier circumstances, will now think nothing of making a trip to the city, or a visit to some distant part of the country. He may take his team with a light load of dressed hogs, or his cutter and favourite trotter. Nothing he prides himself in more than his mare's mettle. Wrapped in buffalo-robe, with fur cap and gauntlet mits, riding ten miles an hour, what is winter to him but the perfection of enjoyment?

"O, swift we go o'er the fleecy snow,
When moonbeams sparkle round,
When hoofs keep time to music's chime
As merrily on we bound."

Now is the time for visiting, merry-making, protracted meetings, magic-lantern exhibitions, phrenological and temperance lectures. Scarcely a night but there is something going on at the school-house. The trustees are very good natured, and make no objections; but the teacher next morning is not so well pleased with the state of affairs.

Such is the round of life on through February, and now people begin their preparations for sugar-making.

Pap has just lighted the fires on a fine March morning, and stepped out to the barn-yard to look at the cattle and give them a bottle of hay and a handful of salt, of which they are very fond at this time of the year. The boys are putting on their boots at the stove in the kitchen.

"Is Pap a-going to hunt up them old sap troughs to-day, I wonder?"

"I guess—I'm a-going to the swamp for a stick to make spiles."

"They ain't none of them sap troughs worth the picking up, 'laying' there all summer. I wish Pap would buy a lot of them cedar buckets, we'd have to look after them, I guess."

Here Pap himself comes in, and orders Gust and Pete to gather as many troughs as they can find, and get them washed out. Hen is to hitch up the old span, take a bob-sleigh, and bring home a good cedar, along with a number of basswood logs, lying at the rear of the lot. They have no black ash on their land, so they will have to do with basswood to make their troughs. It has the advantage of being easily wrought, but being very porous, the inside of the trough is sometimes charred to make it hold in, which tells however upon the colour of the sugar.

It is very stupid of Pap not to look after his troughs a little better. He might have brought them home to the barn, or piled them under cover in the bush, which would have been easier a great deal than making new ones, or hunting the old ones among the snow after their being kicked and tumbled about all summer.

Some who go into the sugar business in earnest have a stock of small hooped cedar or pine buckets, which, at wholesale, are not so very expensive, and will last a life-time if regularly brought home, and piled away out of the sun as soon as sugar-making is over. They keep the sap clean, and that improves the colour of the sugar. But the best sap-holders are made of tin; they are very handy, can easily be kept clean, and do not cost so much after all.

Every year Pap had to make some scores of the old-fashioned kind. But, as he was wont to remark, "What's the odds a man makin' a few troughs when he kin do nothing else." The logs selected for the purpose are usually a foot in diameter. They are cut into lengths of about two feet; each cut is split into two, and then hollowed out with the axe. The Gates's, all hands at work, will make three or four score of them in a couple of days. Looking in at the barn, where they are busy at them, we observe two of the boys sawing the logs into proper lengths with the large cross-cut saw. Pap is splitting the cuts, and Hen is working at the spiles. He has a block of cedar about a foot in length from which he is slivering off pieces with an instrument made for the purpose, and resembling a large gouge, which leaves its curve at the end of the stick, the rest of the sliver takes more or less of the groove, making it a good channel for the sap to run into the trough lying at the root of the tree.

Mr. Gates expects to tap in a day or two. It might not do to begin on the first fine day; there must be some reliable indication of a spell of the right weather—clear sunshine, with a light wind after a night's moderate frost—hit that and you will have a glorious run.

The omeus being considered favourable, Pap sets out in the morning with his axe, and dexterously cuts a "nick" about an inch deep in the butt of each maple. Hen follows with the spiles, which he



fixes in the tree just below the nick, first driving in the gouge to make way for them; a trough is then placed under the drop, and the tapping process is completed. It is a very barbarous one, and the trees cannot stand it long. A hole three-quarters of an inch deep, made with an inch auger, would be just as good a tap, and if plugged up with clay after sugar-making, would heal completely up, and the tree be none the worse.

If it happens to be the right kind of sugar-weather the sap will hardly take time to drop, there will be a tiny stream from noon till nearly dark, and the troughs will need to be emptied. Mary Jane and her sister will have to be at hand to carry the sap to the store-trough, a huge vessel standing beside the boilers, and resembling a large canoe, being the hollowed-out trunk of a monstrous black ash, brought with much ado from the swale away on another concession. Carrying the sap is pretty hard work in the deep snow; for the sugar bush extends a good way all around the store-trough, and has never been cleared up, so that a sleigh could move about and make the collections. But the girls make no complaints, and never take cold, although their boots are often full of snow.

If to-morrow's run promises fair, the boys will have the fires started and the kettles hung betimes in the morning. The fire is built against a "back log," which is renewed as often as required. The kettles hold from ten to twenty gallons, and are hung from the handles on hooks, suspended from a cross-beam resting on two forked sticks. The boiling now commences, and goes on all day, fresh sap being constantly added in small quantities. One sees that it does not boil over, another chops wood for the fire, and the girls see to collecting and carrying the sap to the store-trough. Towards evening they allow it to boil down to syrup, when it is taken off, cooled, and strained. It is now in the form of molasses—maple molasses—the most delicious syrup in the world, not excepting the heathier honey itself! To make sugar, the syrup has to be boiled down till it answers the test—that is, till it *breaks* when spread on the snow.

Before leaving the bush this second night the boys have boiled down the most of the two days' run and "sugared off" besides, taking home with them seventy or eighty pounds of good brown sugar and a painful of molasses. If they can go on at this rate for other eight or ten days, there will be no lack of "sweetening" for one year at least. What a treasure to the housewife a twenty-gallon keg of the rich amber juice stowed away in a corner of the cellar, where it will keep fresh and cool through all the heat of next summer; and though after harvest it may be getting a little scarce, there will always be a saucerful on the table, with buckwheat cakes, when she has any one to tea whom she delights to honour.

Although sugar-making is rather a profitable speculation, if gone into properly, Pap—having once seen the young folks fairly started—takes no more ado with it, knowing pretty well that at certain times his company might not be very desirable. There are always lots of boys and girls—either not in the business themselves, or, if so,

anxious to know how their neighbours are getting on—who think nothing of a long walk or ride on a moonlight night to the sugar bush. Of course they always happen to be there at the “sugaring-off,” which winds up the day’s performance. It might be too much to affirm that sugar—however highly relished on this side the Atlantic—is the only attraction at these gatherings, unless we have to charge Young Canada with insensibility to the charms of pretty girls and the romance of the moonlight hour, under the shade of majestic trees aglare with the red light of far blazing fires. Surely there must be some approach to sentiment in scenes and circumstances like these!

No doubt Pap is very much pleased at the results of the operations in the sugar-bush this season, but he has had his attention fully engaged in the barn-yard among the cattle and sheep. The increase in the stock has been large—nearly all the ewes have had twins, and most of them have been preserved. Along with the good sugar harvest this is encouraging to begin the year with. He is now all alive to the importance of getting a good start with the spring work, of which the Canadian farmer has so much to do, and so little time to do it. We find him, therefore, busy overhauling the ploughs and harrows, cleaning his seed-wheat, and fixing up harness, subject to considerable tear and wear in a new country. Time permitting, he intends to cross-plough all the land he went over in the fall, and to break-up a ten-acre field, chopped some eight years ago, and seeded down in grass along with the first crop of spring wheat. The stumps, being all hardwood, are now pretty soft; and he expects to be able to clean it out entirely during the summer, so as to be ready in September for fall wheat. Then he has to log and burn the ten-acre fallow, where the boys have been chopping the most of the winter. No small job of itself; but he intends having a “bee,” and thus put the whole thing through in a week or so.

There has been no rain to speak of this spring, and the thaw has been very gradual; but now, about the end of sugar-making, the hill-tops begin to look bare, and the roads are breaking up; the snow, soiled with dust and travel, looks very unlike that “saintly veil of maiden white” which, five months ago, came down to cover the muddy roads, and hide from our weary sight the withered leaves and faded flowers. The sleigh-bell’s “runic rhyme” and merry “tintinabulation,” which filled the icy air of the Christmas moonlight, is changed to tuneless clangour. In fact, we are sick and tired of the whole thing. O! to hear once more the notes of the robin and bluebird, or even the bullfrog’s humble song in the marsh.

It is Sunday, at noon, and the young Gates, along with a number of other young men, are on the way home from meeting.

“I say, if we don’t hurry up, we won’t have many more sleigh rides this season, I guess.”

“That’s so.”

"Let's all go to the Corners this evening; their holding protracted meeting there, I guess. Pap will let us have the colts—I know he will; and," continues Gust, "let us take the girls along, and have a jolly good sleigh ride, if it is the last."

This proposal having met with general approbation, they all agree to start at five o'clock—the Gates' to furnish one team, and the M'Kee's another.

The "Corners," where the protracted meeting was going on, was a place some six or seven miles distant. The intersection of concession lines with side lines, at intervals of from two to three miles, forms, all over a township, what are called Corners. In a rising settlement it is an object to have one of the corner lots, for the owner has the advantage of a road on two sides, and if the place should happen to grow to any importance, it will be here it will begin, and in the usual way, with a tavern, a blacksmith's shop, and so on. At the Corners referred to, not only were these signs of growth manifest, but several one acre lots had been taken up and built upon. There was also a large school-house which, as in most new settlements, was used as a place of worship. The various Methodist denominations had held "protracted meetings" in it during the winter, each in turn. The one going on at present was conducted by the "Noo Connexion"—a body which had only recently sought representation in this part of the country: and having, as yet, only a limited influence, had been obliged to content itself with the privilege of the school-house on Sunday, and other evenings, after the Wesleyans, the Primitives, and the Episcopalians were done with it. The "effort," which had been inaugurated only a week or two ago, was therefore a little out of season, and would soon have to come to an end, owing to the state of the roads. Indeed, this was understood to be the last night. The "Noo Connexion" could hardly be said to have made much head-way at the Corners. Its apostle, having been rather injudiciously selected, never acquired much popularity. His "appointment" was every alternate Sunday, in the middle of the day; but having managed to obtain the use of the school-house for a few nights he did his best to provoke a revival, but the more immediate residents of the place, kept sullenly aloof, and looked upon the whole thing in a very anti-noo connexion light indeed. The preacher got discouraged and left. "A more gospel-hardened set he had never come across." His successor, a Mr. Baskerton, had more hope, and manfully resolved that the "appointment" should not be abandoned. Having made his appearance as a Sunday evening lecturer during a short interregnum of the Primitives, and at a time when the roads were good, he commanded large audiences. Encouraged thus to persevere he waited his opportunity, and at length announced his intention of making a protracted effort before the roads broke up.

Exactly at five o'clock Gust has the colts hitched up, and the buffalo-robés in the sleigh. "All aboard" is the signal—the girls

jump in, and away they go. At the Bell's and the Austin's they pick up other girls, and now the Gates' party consists of eight or nine persons, a sufficient load in the present state of the roads, which, in the clearings, especially on the south slopes, are nearly bare. M'Kee's team is a little way ahead. The girls anxiously remind Gust of several places where he will have to be careful with his skittish colts. The school hill is one of them. It is rather a steep one, and at the foot the road narrows considerably, winding round the face of a hill on one side, with a somewhat formidable hollow or gully on the other, now well filled with drifted snow. Loaded teams coming down the hill, and slackening pace too soon, had often swung around, and even been known to tip over at the entrance to this narrow passage. In fact the school hill had such a bad reputation that the girls, knowing Gust's Jehuistic propensities, made it conditional upon their going that he should stop when they came to it, and allow them to walk over; but Gust had no intention of keeping his word. On they went full speed till they reached the slope, which, from being hard packed with the children sliding down on boards and little hand sleighs, was one sheet of ice, and the horses' feet—not now so sharp as they had been—the descent was anything but agreeable. For Gust to stop, or the girls to jump out, was now impossible. Since noon a mass of snow had fallen from the embankment above where the road began to narrow, obstructing the passage; the other team had got safely over it, but the colts, on coming up to the heap, stood stock still all of a sudden, round went the sleigh, and out poured the whole freight down the sides of the gully. Fortunately Gust stuck to the lines, and before the sleigh had time to tip completely over put the whip on, and was right in a minute.

An upset in the snow is seldom attended with very serious consequences, all the harm done in this case was to the girls' caps and ribbons, which being set to rights with far more laughing than lamentation, the journey was resumed.

The most of the way now led through the bush where the sleighing was tolerably good. Here they enjoyed themselves singing the common camp-meeting hymns, "I'm a pilgrim," "I love Jesus," "Happy day," &c., &c. Thus, without any new adventure, they arrived in due time at the Corners, and tying up the horses in the shed adjoining the school-house, putting a blanket on each, and throwing them some hay, the whole party entered and took seats. Mr. Baskerton was just giving out the first hymn—

"Come, holy Spirit, heavenly dove,
With all thy quick'ning powers."

The whole hymn was read with a running commentary or exhortation:—"Let no heart be steeled against divine impressions this night; it might be the last opportunity some of them would have. The Spirit would be here in great power; he had prayed, his brethren had prayed, and something whispered to his heart that the

answer would come. Hitherto he had been trusting too much to his own efforts, but to-night all his trust would be in the salvation of God."

After singing the hymn, in which the congregation joined, there was the usual prayer and reading of the Scriptures; then another hymn, and the preacher announced his subject—*The Prodigal Son*.

"It was an old story he had just read, but the thing itself was ever new. There were prodigals now as well as then. He knew of one that was present at this very meeting; would they like to be told his history? It was this. He was the son of godly parents, but took to bad company and the ways of unrighteousness. At length he left his home and his father's house, and came to the land of the stranger. All restraint being now withdrawn, he abandoned himself to riot and excess. But the eye of Omnipotence was watching over him; his mother's prayers and tears were not forgotten. He got religion where other young prodigals might get it, if they had a mind—just at such a meeting as the present, where he had gone to scoff, but remained to tremble and to pray." It came out in the end that the preacher was merely giving his own experience. In this way was the "Prodigal Son" illustrated; but the Methodists do not count much on preaching at protracted meetings, the main dependence being placed on the machinery of the "Penitent Bench," to which an immediate resort was now made. "Brother Bawkins," a lay instrument, is asked to "lead in prayer," which he does at the utmost pitch of his voice. The preacher stands by his side, and calls out in quite a business style, "Come forward, friends! still there is room," or, slapping the lay brother on the back, tells him not to "give in." "Pray on, Brother Bawkins; bring him down! down with him!"

But it is up-hill work. These dull Cornerites would not be moved, and there was no sign of anything coming down. In fact, the audience, which consisted for the most part of young people, had all the time been talking to one another, as indifferent to what was going on as they well could be. Gust, who was sitting along with his party, sometimes listening, but oftener talking, like the rest, now rises, and slowly pushing his way through the crowd, makes for the door, but gets pulled up by the preacher in the following manner:—"I see a young man turning a deaf ear to the voice of warning. I say, young man, take the trouble to count your steps as you leave this place, and when you have numbered ten, say to yourself, 'I'm ten steps nearer hell.'"

There was something almost maledictory in the tone in which this was spoken, so that its effect upon Gust was anything but what the preacher intended. Smarting under the stroke, which had been so palpable, and, as he thought, undeserved, for he was only going out for a moment to look at the horses, he turned round to where he had left his friends, and almost shouted that he was "a-going," upon which they all rose up and left the meeting. In a few minutes they were in their seats in the sleigh; and if Mr. Baskerton had been

listening to the conversation which enlivened the journey homeward, it might have been a lesson to him in the management of future protracted meetings.

It is far from my intention to speak disrespectfully of the Methodists, or their mission in the back townships. They are a great body, and their agents are of every degree of intelligence and fitness for the difficult work they have to do. Of course, it is not to be expected that they will send their best men among the humble settlers of the back townships; and yet it would be well that they did so occasionally, if only to correct the mistakes of weaker and less discreet brethren. The effect upon children and young people of such demonstrations as the above is anything but hopeful. Brought up in the atmosphere of protracted meetings, which they never fail to attend, hearing and seeing all that goes on, and contrasting it with the reality of actual life, there is often a great temptation to make a profane travesty of the whole thing.

The Methodists are the pioneers of Christianity in the backwoods; but as the country gets settled up other denominations come in. The Canada Presbyterian Church, in affinity with the Free Church of Scotland, is now well represented in the back townships, but seldom enters the field on mere speculation, requiring of its adherents a certain guarantee of support, in which case it sends a student during the summer; and if by his exertions a congregation is formed, there will be in due time a resident pastor.

At length the snow has all disappeared, not as in the case of a sudden thaw, leaving the sod bleached white, the rivers full, and the roads knee-deep in mud and slush. The sun, the chief agent this year in bringing about the spring, has done the work gradually. Operations in the sugar bush have come to an end, for the sap, if it still continues to drop a little, flavours of the life of the tree, and is useless, except, perhaps, for vinegar, which, by the way, is an article of no small consideration in the *cuisine* of the Canadian housewife, who has always such lots of beets and onions to pickle, not to speak of the small fruits she has to preserve, which, with vinegar and spices, do not require anything like the quantity of sugar used in the ordinary way, and are nevertheless so good.

"Now—from the stately elms we hear
The blue-bird prophesying Spring."

The robin, too—best known bird of the Canadian woods—is beginning, a little clumsily at first, to try his scales. Add to these the chickadee and the "canary," one or two thrushes, several species of woodpeckers, the blue jay, and the whip-poor-will, and the list of Canadian birds that will at first attract the ordinary settler is completed. They are all favourites, but I can stop to describe only one or two.



Blue bobbie makes his appearance on the first approach to genial weather—often before the snow disappears. A cold “snap” of a day or two may drive him back to the shelter of a deep glen, only to reappear in better spirits when the storm is over. His whole upper surface is a rich azure, with purple reflections, excepting the shaft feathers of the wing and tail, which are jetty black, contrasting beautifully with the blue. The breast and belly are of a reddish hue, ending in white at the abdomen. The hen has similar tints, but not so bright. Blue bobbie lives on caterpillars, worms, and spiders, of which he devours great numbers, thus earning his right to a few cherries in the fall, although there are those that grudge him the treat.

We have a whole tribe of thrushes, of which the best known are the song-thrush and the robin, so called—very, unlike his pugnacious little namesake at home, all the resemblance being his red breast and a certain confidence in himself, which brings him nearer the dwellings of man than most other birds. He is a true thrush, however, and sings a very sweet, artless song, some of the notes not unlike those of the song-thrush. He is one of the earliest warblers in spring. The nest, plastered inside with mud, with five pretty green eggs, is often built in the orchards. In size he is three times larger than his old-country namesake. Every boy knows his yellow bill, ashy-brown back, black wings, edged with ash, and the deep orange colour of his breast. He, too, professes to live on worms and caterpillars, but some people think he is altogether too fond of cherries. That eminent philosopher, Josh Billings, who appeared to have suffered from his depredations, speaks of him in these terms:—

“The red-brestid robbing is a burd muchly doted onto by seminairy girls and poits.

“Gentlemen farmers also encurridge the robbing, because he swallers insex when he can’t get sno nor northing else to eat.

“But practickle farniers and fruit growists begin to don’t see it.

“I was onct a gentleman farmist.

“I used to listen for the robbing’s lay and his evening carrol, but I found out that he singed only to seduce femail robbings; and that where he et 5 insex he et quarts of cherries, strawberries, currants, rastberries, and ceterer, and then pitched into the mellerest bartlett pairs.

“I found that my fruit crop agreed too well with Mr. robbing’s crop.

“He’s wobbling to his femail friends at evening did not pay for his gobbling choice fruit all day.

“And so, my friends, when the swete red-brest gets fat on the eggspensif products of northern gardings, and flocks southward to fill unsentimental pot pies, I bid him adoo without regret.”

Mr. Billings here refers to the melancholy fate which awaits numbers of the pretty thieves when they leave their northern home for a winter in the south. It seems they are very fond of the berries of a tree called the Pride of India, which is extensively cultivated

for ornament and shade in some parts of Georgia and Florida. Its fruit has such an intoxicating effect upon them that they can neither fly nor sit upon the branches, but fall down quite helpless, in which state the coloured people gather them in large quantities, and make them into pot-pies, which they esteem a very savoury dish. If left alone, it appears, they soon get all right again, but unfortunately, like too many of a superior order of existence, they do not learn wisdom by experience.

The fields ploughed in the fall are now working off the frost; the soil heaves up like yeast, and the clods melt into jelly. Too soon to put the plough in yet; a few days' drying, however, will greatly change the look of things, except in those fields where the surface water has no other way of getting off but by the slow process of evaporation. It had often been suggested to Mr. Gates that a good ditch or two on some part of his land would be of service, but until last year he had dispensed not only with drainage of this or any other sort, but also with spring ploughing to any great extent, his usual practice being to harrow in the seed where he had ploughed in the fall; this year, however, having adopted a system of drainage sufficient to carry off the surface water at least, he was prepared to give some of his fields a going over again before seeding.

Nothing can be done in the fallow for more than a month yet; it is all ready for the match, but it must first be in a condition to burn. It will also be a week or two before they can touch the stumps in the ten-acre field which Pap intends to clear up and plough for fall wheat this summer; the frost lingers long about the roots, holding them down with the vigour of iron, but once out, the stumping can be done to advantage after the expansion and subsequent upheaval. Ploughing will therefore be the first regular work they can go at; they have two good horse teams now, as well as a yoke of oxen. The boys do not like to handle the latter in the plough, so that Pap himself will have to take them; but he is well accustomed to their slow gait, and remembers when he had nothing else either for the plough or the harrow. The man who has to make his living out of his land from the commencement, cannot afford, like the Raymonds, to seed it down for six or seven years, but must keep working away at it, giving the stumps a wide berth at first, but every ploughing helps to break up the roots and hasten the final clearing. All this is done with the help of oxen better than with that of horses.

In the early part of the spring, if the roads are at all passable, our friends indulge themselves in a day or two's fishing. At this season of the year the streams communicating with the lakes are literally alive with mullet and suckers.

"Each creek and bay with fry innumerable swarm."

In their efforts to ascend the rivers, the fish-huddle one another so thick that they may be lifted out by the basket. The usual

practice is to troll with a bunch of large hooks tied together, some of which are sure to *stick* when the short stout line, attached to the end of a pole, is pulled through the crowd. If the first rush, which only lasts a day or two, is over, the sportsman has recourse to the spear. This is not such a wholesale process, but the sport is, if anything, better.

The young Gates, with two or three others, having decided upon a day's recreation, set out with the light waggon early in the morning, taking care to be provided with all necessary apparatus and conveniences—a lot of dry cedar bark for torches, trolling lines, spears and spear-poles, bags to hold the fish, &c. After a long ride through the mud, and over the "corduroy," they arrive at a tavern convenient to the place where they expect to commence operations. Here they put up their tired horses for the night, and refresh themselves with supper. Meeting with others on the same errand they learn that their sport will have to be with the spear, as the first rush of the fish is over. This is a little discouraging; nevertheless, they prepare to make the best use of the time at their disposal. The creek they propose to try is only a short distance from the tavern, and is well adapted for night sport, as the banks are low and free from shrubs. The bottom is muddy, and there are plenty of pools, not too deep, where it will be easy to drive the fish with the glare of the torches. At first the boys make a good many misses from want of practice, but they soon get into the right fling, and seldom fail to strike their game. It is glorious fun all through the moonlight night, under the sheltering dwarf beeches, overhung with the "gadding vine." At length, tired out with their sport, and having as many fish as each can conveniently carry, they wend their way back to the tavern, and, after breakfast and an hour or two's rest, prepare for the journey homeward, time being too precious at this season to admit of another day's sport.

There is another kind of sport at this time of the year—not so seasonable or lawful, but often more profitable than fishing. The game laws of Canada wisely prohibit the killing of deer at certain seasons; but nobody ever thought of their being enforced at Corning's mills, where almost every settler used to have his rifle and a "salt log" in the rear of his lot, and did not scruple at a shot, whether in season or not, least of all in the spring of the year, when it could be got so handy. Taking advantage of the natural craving for salt, which the deer—in common with cattle, sheep, and horses—have at this season especially, they select a quiet spot in the bush, in the rear of their lot, where, finding the trunk of a tree which has lain a year or two, they bore a few holes in it with a large auger, and fill them with salt. In a short time the deer find it out, and visit it regularly. A point is then chosen—about a hundred yards from the log—where a screen of brush is put up. Behind this the hunter sits with his rifle at full cock, ready to blaze away when a chance offers. A path, ascending towards the screen, if possible, has to be kept clear of leaves, and the utmost precaution observed

in approaching, as the least flutter or scent will be telegraphed to the log;—in which case the hunter may as well turn back. The best time to go is just before daylight in the morning, with the wind from the log, when, if the game is there, one can hardly miss.

But to return to our spring work. During the two days the boys were absent on their fishing excursion, Pap has been busy fixing up the fences blown down since last fall. The common "worm"-fence in use all over this country and in the United States, on timbered lands, consists of "rails" laid zigzag at an angle of about 25°, the ends resting alternately on one another. The rails are about ten feet in length, and made of cedar, if it can be had, for it splits easily, and being of a resinous nature will last almost a lifetime. It is a very light wood, however, and requires bracing at the corners, which is sometimes done by an upright stake on each side, capped on the top with a cross-piece, having a hole at each end for the top of the stakes to enter. A fence of this description will stand a pretty severe storm; but it is the fewest number that go to so much trouble, being content with a rail prop, consisting of two rails, one on each side the fence, and crossing each other at the corners, so as to form a "crotch," into which a heavy top rail is put. In the absence of cedar, the next best is elm, which makes a strong, substantial fence, and needs little propping. It is usual to pick out the logs from which the rails are split when the trees are being chopped in the fallow. The splitting is done with wedges and a heavy wooden mallet, shod with iron. The Gates, with ten acres of a fallow to fence this spring, will have lots to do. The logs are lying ready, cut into proper lengths, but they won't be touched until after the fallow is logged and burned, as it would take too much time and labour to remove them from the heaps of brush and other timber. They may be a little scorched with the first brush-fire, but this will do them very little harm.

Having cross-ploughed all the land fit for working, they turn their attention to the stumping of the ten-acre field already referred to. It has been in grass ever since the first crop of wheat—not pasture, but real meadow—and has produced some splendid crops of timothy, all from the first seed. Beginning to run out, however, they have determined to break up the field, and have it ready for fall wheat. The roots have never been stirred by the plough, and consequently will be less decayed and firmer in the ground than if the field had been cropped a few times. There are stumping machines in use that will take out a stump as easily as a dentist pulls a tooth; but the one best known in the back townships is the ox-team and logging-chain, applied to a great number of other useful purposes. Having ascertained by a kick with the foot that a stump is likely to move, the chain, which has a hook at the end of it, is hitched round the head. The oxen, with the other end of the chain attached to the neck-yoke, are put to the "jump;" and if the first jerk does not bring the stump, they try another. But both the spade and the axe have to be used sometimes, digging round the larger roots and cutting them.

Thus they go from stump to stump, omitting the hemlocks—if there are any—as no ox-power can hope to stir them yet. It is now a fine job for the little ones, if the settler is blessed with a lot of them, to gather up the roots and fragments, and pile them round the stumps. It is still better fun to attend to the burning, when the whole has dried sufficiently ;—they may have some hundreds of small bonfires going at the same time. And now, after the fire has cleared away a good part of the rubbish, but not quite all the stumps yet, the plough enters and breaks up the sod, turning up a great many more roots. These are again piled round the remaining stumps, left a few days to dry, then more bonfires.

By the time Pap has got through with his stumping and ploughing of this field, the other fields—also ploughed in the meantime—are ready for the seed. All hands are, therefore, busy sowing and harrowing. This—the most important work of the season—over, they are ready to go into the logging of the large fallow chopped last winter. It is the heaviest job they have on hand, but must be got through with in time for turnips and potatoes. As a preparatory step the brush has to be burned. It is now dry enough. On the first favourable wind, therefore, fires are lighted in different parts of the field. In a few hours the flames have licked up every vestige of brush, and a great many of the smaller limbs. A good burn is of the first importance, as the work of logging is thereby much easier. It would take several weeks for the Gates to do all the logging of their fallow without assistance, and this would throw them too far behind for a crop of turnips and potatoes, so Pap has determined on having a “bee.” Gust has been round the neighbours and given the warning. They expect from twenty to thirty men, and five or six ox-teams. If they all work heartily, they will do up the best part of the ten acres in a day. At home the girls have been busy for two or three days preparing for the occasion. Sugar is plentiful, and one of the boys has managed to kill a good fat buck at the salt log. It is a little out of season ; but with an abundance of well-preserved bacon and home-smoked ham, they will be able to set out a pretty respectable table.

Logging, which is, perhaps, the hardest work in the clearing up of wild land, consists in piling the fallen timber in convenient heaps for burning. The trees have been previously cut into logs of from ten to fifteen feet in length. This was done partly in winter at the time of the chopping, and partly after the burning of the brush a few days ago. The very large logs, elms perhaps, being inconvenient to move are made the commencement of the heaps ; the smaller ones, in the immediate neighbourhood, are hauled up close to them—one man with a yoke of oxen and chain, which is hitched round the end of the log, does this part of the work ; four others, two at each end, with handspikes pile the logs on top of one another. This is what tries a man's mettle, and the young and foolish often hurt themselves in showing off their strength and dexterity.

The loggers have formed themselves into gangs in different parts of the field, leaving room for each other to work. All sorts of fun, chaffing and racing with one another, go on until noon, when the horn is blown for dinner, Mary Ann giving it a few of her best flourishes, or a stave or two of a camp-meeting tune. She is the best hand at the long horn all round this part of the country is Mary Ann; and, when the men are praising her pumpkin-pies, her musical performance will not be forgotten.

In the afternoon the work slackens a little, but still Pap is well pleased with what has been done; for a couple of days with the boys and his own team will finish up the whole thing. A good many have a prejudice against bees, and neither go to them (except it be a raising) nor have them themselves. They argue, with some truth, that the days they have to give in payment to each one attending the bee are worth more to them than all the work they get done: and this may often be the case, especially where a man has no sons or other help about his place; still, the advantage of getting an important piece of work done at once may often be so great that the time given in repayment will not be grudged.

The Gates have a good cedar swamp on their lot which has kept them in fences from the start; but this winter, the island fallow being rich in choice good-splitting elm, a sufficient number of logs were cut and left for rails, and while the log-heaps are burning they ply the mallets and wedges. The usual practice is to take off four outside slices, leaving the core square, which, being too wiry to split, they turn over into a log-heap. Each of the four slices is further split into so many rails. The log-heaps, after burning a day and a night, are now carefully "branded up," and any loose pieces of brush, roots, or chips are thrown on the top. This may have to be repeated more than once, especially where there are any hemlocks; but these, instead of being left to protract the burning, should, if possible, be taken to the saw mill and turned into lumber. And now nothing remains but the ashes. I have seen a good deal of putting in some of our emigrant guide-books about what *might* be realised from potash, but I would not advise the settler, ignorant of the business, to have anything to do with it. Let him sell his ashes for threepence or fourpence a bushel to some "ashery man," who may be glad enough to get them; or, if he cannot dispose of them in this way, the next best thing he can do is to scatter them over the fallow. The potash business is all very good if you give yourself to it, but it "don't pay" along with clearing up and cultivating a farm. Pap takes the easiest way of getting rid of his ashes, that is, scatters them over the fallow. This and the fencing of the field completed, he is ready, after the first rain, to sow the whole with turnips and potatoes, which will keep the weeds out till fall, and then, if the crops are got off in time, the land will be none the worse for winter wheat. Very little time will suffice for getting the potatoes in. The loamy soil, soft as wool, where the roots are not too near the surface, receives a few seedings here and there, which are "hilled" up with the hoe. A child of ten years of age may do the whole thing.

It is now on in June, the fall wheat is well advanced ; the spring has a good braird. Pap has been giving his mornings and evenings to the garden. The cabbage-plants, raised from the seed in an artificial bed protected from the flies by a screen, are doing first-rate, so are the onions. Pap has tried to raise an orchard, but has not yet succeeded ; his neighbours have tried it with no better success. From some cause or other apple trees have been a failure at the " Mills ;" and yet, strange as it may seem, only a few miles to the east, in a much newer settlement, they have splendid orchards. Some say it is owing to the proximity of extensive swamps affecting the mean temperature. Pap himself blames the fruit-tree pedlars for passing off old stock, and the fruit-tree pedlars blame Pap with carelessness in planting. But Pap can raise any quantity of Siberian crabs, and his " old woman " knows how to preserve them.

Where the clearing is well advanced, there is now a lull in the labours of the farm. Of course one can always find plenty to do, but he will not be driven so hard. Now is the best time to stump and clean up fields that may have been several years in meadow ; to build barns, stables, and root-houses. Indoors, the women are busy with their wool. Before shearing, the sheep are washed in a creek or pond ; and, when dry, some neighbour accustomed to the shears is hired to do the clipping. The wool is then taken home and picked, preparatory to being sent to the carding mill. Sometimes it is in a dreadful state with burrs, of which there are three or four kinds growing on the roadsides and in the fence corners, where the poor sheep have often to hunt for a scanty living. But Mrs. Gates is going to have a picking bee ; all the old gossips will be invited ; the tea will be made pretty strong, and " ginger will be hot in the mouth." Mary Ann will also have some of her young friends call in the evening ; the boys, by accident, may happen to drop in too after the old people go away. It is quite possible there may be a dance, if old Telfer's fiddle can be had.

The wool, picked and sorted, goes to the carding mill, and comes back in rolls ready for the spinner, who uses the large wheel driven with the hand. This is now Mary Ann's duty, since her mother has begun to get up in years, but there won't be much done till after harvest.

With summer comes another opportunity for travelling. Sleigh-riding not being so attractive to the old people now as in former years, this is their chance. The roads are good, and the days long. They have a few old friends and relations whom they like to visit occasionally, and the old lady has saved two tubs of butter without a taint of forest-weeds, such as " leeks " or " adder tongue," also a box of fresh eggs, packed in oats, the sale of which in the market, or by the way, will pay expenses, and procure a few articles of dress and finery for herself and the girls. They will take the " old span " and the new light spring waggon, and be back in eight or ten days.

Summer will be somewhat different with the settler just commencing, and having everything to do himself. He will have got

his small first year's clearing ploughed in a sort of a way, and sown with spring wheat; and he may have managed to log and clean up as much of his winter's chopping as will do for potatoes, ~~and~~ turnips; but the rest of the fallow has now to be attended to for fall wheat, which, with some building he may have on hand, will keep him at home with his hands full. Or perhaps he may have a well to dig, which will be labour well spent if he has no spring on his lot, and has to drive his cattle to the creek twice a day, or team the water home in barrels. In this case, the exact spot on which to commence operations will be a question of some importance. If, like most of his neighbours, he has faith in the "witching stick," the difficulty will be referred to its subtle and mysterious power. A small twig, with two stems branching out so as to form a crotch, held in a peculiar way with both hands of the operator—who must be a believer—this is the witching stick. It is carried up and down the place where it would be convenient for the water to be, and if water is there, the end of the stick not held by the hands will bend downwards and mark the spot. I never saw any harm in following its indications, for water is just as likely to be found where it says it is as anywhere else. A great deal has been said for and against the witching stick. The argument in favour of it is, that some men possess the faculty of indicating subterranean springs and currents by sensation, the thing being called *Bletonism* after the Frenchman Bleta, who had such a faculty. Electricity is the secret of the whole thing, and this is said to explain how only a few are capable of operating with the stick—namely, those positively or negatively charged with the fluid; where there is an equilibrium in the system of the operator, the witching stick will give no sign. I never could get the stick to do anything for me; but have often seen it bent and bending in the hands of others, whether by electricity or *pressure of the stems of the crotch by the operator*, who is generally excited at the time, I have not been able to decide.

In most instances, well-digging is not a very difficult matter, and much of it the settler can do himself. If there is a rock in the way, of course it will be better to engage the services of a regular well-digger at so much a foot.

It is now the leafy month of July; long and beautiful are the days, the nights still and breathless, sometimes cool, or with a warm smoky haze. Myriads of fire-flies dance in the shade of trees. Dreamlike and indistinct in the yellow moonlight are all things blended together—sight and sound. Far off and nigh the heavy clang of the cow-bell, the drowsy tinklings of the roadside sheepfold, the flute-like, melancholy, ever-receding song of the whip-poor-will, and the ear-piercing shriek of the night-hawk swooping downwards to the earth—these are the voices of the night. How different will their interpretations be! Sitting alone on a rail fence it may be,

the immigrant is oppressed with the foreignness of feeling, sight, and sound. All is very beautiful; but he remembers other moons and other scenes of hill and strath that echoed the cornraik's ceaseless song; and, melting with the thought, he sings to himself, "O, why left I my hame?" &c., &c.

I know it is no joke the first year or two; but it won't do to get spooney, the pill has to be swallowed,—not forgetting the dear old land, but learning more and more to love the new.

At length Pap and the old woman have returned from their tour of business and pleasure—the latter full of news and the fashions, and just in time to have the girls put in shape for the "twelfth." Orangeism has taken quite a hold in Canada. Nor is the organization confined to Irishmen, as might be supposed, but includes both Scotch and English. Some have the notion that it is necessary to the stability of the country and the maintenance of the Protestant faith. The twelfth of July is the great anniversary, which is celebrated by a meeting of the lodges situate within certain limits, and a "walk," with drum and fife, to the tune of the "Protestant Boys." They generally have a sermon, and wind up with a supper and ball. I recollect hearing a Scotchman at one of their public gatherings holding forth rather wildly on the claims of the institution upon his countrymen:—"Have Scotchmen to be reminded of the glorious Revolution of 1688, when William the Protestant and hero of immortal memory ascended the throne of the Popish persecutor; when the long-banished son returned to his mother's embrace—the exile to the home and friends of his youth; when——" &c., &c. The audience thought it very eloquent.

Of late years Fenianism has helped to strengthen the body. New lodges have been formed, and old ones have added to their numbers; but the mere monotony of the thing kills out in time a good many of the country lodges. For a while at first—getting up a lodge-room, with the paraphernalia of flags and other insignia—great zeal is displayed; but when all the available people are "made," it becomes a question, "What next?" This, of course, has reference to the back townships. In the towns and cities, among able and intelligent men, it may be very different.

But fifteen acres of meadow, more or less, invite our friends to other work than celebrating anniversaries of old battles. The day after the "walk," therefore, finds them busy with the scythe and rake. A good week's work is before them;—it might take longer, but the warm wind and the hot sun will do the curing part in little or no time. In the morning it may be green and wet with dew: in the evening it is withered—perhaps in the barn.

It is that variety of grass called "Timothy" which is most in use, and found to answer best in this climate. It is said to derive its name from a Mr. Timothy Hilsa, who first introduced it to the State of North Carolina. In the year 1763 it was brought to England, where it is known by the name of catstail or herd's grass.

It is perennial, having numerous leaves on the stem, which rises from three to four or even five feet, with a cylindrical flourhead or panicle three or four inches in length. Although coarse in appearance animals are very fond of it, either green or in hay. The seed is a very small globe, of a silvery grey lustre when good and fresh, differing from all other grass seeds in its weight, which is 44 lbs. to the bushel. It is a very important crop in Canada, and the farmer who has plenty of it need not be afraid of a long winter.

Barley comes next, of which the Gates this year have something like ten acres. Canada barley is now in brisk demand on the other side of the line for malting purposes, for which, owing to the weight and beautiful colour of the grain, it is much better adapted than any the Americans themselves have yet been able to raise; so that, notwithstanding an import duty of fifteen cents per bushel, they are ready to take all we can give them, and their demands are not likely to fall off while they continue as they are doing, to become more and more a beer-drinking, instead of a whisky-drinking people.

The ten acres of barley no sooner cut and in the barn than it is time to turn into the fall wheat, of which they have also ten acres, this being considered a more than ordinary breadth for a backward place like Corning's Mills, where the main dependence had also been in the later spring crops, some settlers having seldom or never tried the other variety, from the risk, which in one way or another attends it. The principal crop in all new settlements is spring wheat, which is often sown as late as the beginning of June, and is usually ready for harvesting about the first week or two in September. The Gates have close upon 35 acres of this crop. Sown, as the ground was ready, through nearly the whole of the month of May, harvesting does not come upon them all at once, but still the work is pretty hard, whether swinging the cradle all day, or raking up and binding after those that do. The boys prefer the former, as being more consequential. Pap, with a hired man or two attends, to the latter. At length the crop is cut; a few days in the stook, and it is hauled into the barn, piled in the mow, where it remains till the threshing machine comes round in the fall, when we arrive at the point at which we took up our friend, the Paisley weaver—and so complete the round of Life in the Back Townships.

PART SECOND.

THE PRAIRIES OF THE NORTH-WEST.

ONE of the first questions asked about the Prairies is, "Do people not get tired of the monotony of the everlasting level?" A stranger's first impression of the Prairies is, that life, amid scenes so unvarying, must necessarily be dull and uninteresting. But the scenes are not so unvarying as one might suppose;—there is, at least, the ever-changing kaleidoscope of the sky, which nowhere else so soon begets and rewards observation. We know what the heavens were to the old Chaldee. To the Western settler, with an upward look that might soon become habitual, their amplitude and magnificence may be a great deal more. "Love the Prairies!" says one who has all the affection for them that the sailor has for the ocean, "I worship them; I live in tender and affectionate awe of their immensity. We dwellers of the Prairies live between two heavens,—one of matchless green beneath our feet, and one of fadeless blue above our heads, and, circling around us, we see those fade into each other at the horizon. There is more exhilaration in a gallop across our Prairies than there is in champagne. The world stretches itself out before me—a great wide, unbounded world, full of room and freedom. Shut me up in some little narrow valley, with the great mountains frowning down upon me, and I would smother. Resplendent with beauty the valley may be—the beauty of grey rocks and dainty ferns, sparkling cascades and pine-covered hills, but I could not breathe in it; my heart would ache for the broad free plains, and the springing turf under my mustang's flying hoofs."

But to come down to plain matter of fact, let us endeavour to realize some of the real aspects of a Prairie region. The valley of the Red River is one of these Prairie regions, and, for various reasons, claims our first attention. Let us say, however, that the word "valley" in this case is not apparently applicable to the country at all. Looking east or west from either bank of the river, where no belt of woods intervenes, we see a uniformly level or slightly undulating plain, bounded by the horizon, but no sign of a valley. Larger rivers than the Red River have valleys not more than a mile wide, within which, raised a few feet above the water's edge, and extending thence to the slopes of the valley on either side, may often be seen a small tract of perfectly level bottom land. Imagine a bottom of this kind, but on a prodigious scale, and not so perfectly level, spreading out like a fan towards the north, and you will have some idea of the surface of the Red River valley. It is some 300 miles long, and from 40 to 100 miles wide. Its western limit is defined by what appears from the plain to be a range of low hills bounding

the horizon; but which, in reality, is the beginning of another more elevated prairie, rolling away to meet another still higher; and so on, till we reach the foot-hills of the Rocky Mountains. The "lower plain," or Red River Valley, is 700 feet above the sea level, the next is 1000 feet, and the next again probably 1600 feet. At the International Boundary Line the valley extends west from the river 50 miles; at the northern boundary of Manitoba it stretches out to nearly double that distance. East of the river, at an average distance of 20 miles, the valley is bounded by a "ridge," which is not, however, so continuous, so elevated, or so well defined as the boundary on the west. It is not the beginning of a new Prairie rolling to the east to meet another still further on. It is the commencement of a tract of country as yet but partially explored, and about which the most contradictory reports have been circulated;—being represented, on the one hand, as a barren, rocky waste, unfit for human habitation; on the other, as a country rich in forest and mineral wealth, with many beautiful and highly fertile oases scattered through it. In a subsequent article I shall give the result of the most recent explorations of a part, at least, of this debateable land.

The great plain contained within the limits of the Province of Manitoba is perhaps less than one-half of the entire valley; the other half, thanks to Lord Ashburton, forms part of the far extending possessions of Uncle Sam. His share is much longer, but not so wide; in every other respect it is much the same—the same in climate, soil, and productions; the people are the same; they live in the same way and for the same purpose—that is, to grow wheat. An imaginary line divides them; that is all. Generally speaking, the surface of this immense plain is covered with river mud, in all respects similar to that which the rivers now deposit. The average depth of this alluvium is two feet, but, as may be seen along the banks of the river and in some of the *coulees*, it is sometimes from 20 to 30 feet deep. There are spots like Bird Hill to the east and Stony Mountain to the west of Winnipeg that rise like islands out of this sea of mud, and indicate the inequalities of the bed on which the alluvium rests, but not any caprice on the part of the alluvium itself, derived as that must have been from frequent overflows of great, shallow, sluggish streams, of which the Red River of the present day is perhaps a feeble and insignificant type. In short, the soil of the Red River valley is the product of the rivers, in the same way that Egypt is the product of the Nile, except that the sediment is derived from washed-down drift, not from distant mountain sides. Immediately underlying the surface alluvium we find another sediment of a finer quality and a lighter colour. This is a deposit from standing, not from running, water. It is the mud of a great, shallow lake, that grew from a small beginning towards the south until it finally covered the entire plain. This sediment or lacustrine clay, where it occurs—for it is not by any means so universally present as the alluvium on top—has an

average depth of 25 feet, but where it has filled up some hollow or pocket, it may be found 50 feet deep, and even more. It makes good white brick, and there is enough of it, especially towards the north of the valley, to build a second Babylon, tower and all. It generally rests on a layer of sand and gravel, and where this is the case there is no trouble in finding good water. All that has to be done is to bore a hole with a nine-inch auger through the alluvium and the clay into the sand, insert a sheet-iron tube with openings near the lower end, and then attach a pump. All last summer I used a well of this kind; the water never failed, although large quantities were used, and it was always pure and cold. I have seen such wells bored and made ready for use by the labour of two men in an hour or two, and the whole cost, exclusive of the pump, did not exceed ten dollars. Next to the question of fuel, that of good well water is perhaps the most vital in connection with the settlement of the north-west. Some rare and curious springs we have, like that near Sturgeon Creek, six miles west of Winnipeg, but the clear rushing streams and leaping fountains of a hilly country we naturally have not in any part of the prairie region. Our wells, when they used to be sunk into the drift which underlies the surface coverings already described, and especially when it was the universal practice to curb them with pine boards, were very unsatisfactory. Many of them were disgusting in taste and smell, and their use was not unfrequently attended with the most serious consequences. So much so that in the year 1877 the Board of Health of Minnesota decided to make an inquiry into the cause of the disorders becoming so prevalent as to interfere with the settlement of that part of the State bordering on the Red River. Accordingly, an officer of the Board, along with the State Geologist, Mr. N. H. Winchell, made an extended reconnaissance of the valley, from Breckenridge to Winnipeg, and reported that the evil in every instance resulted from the practice of curbing the wells with pine. The water is all more or less alkaline—that is to say, it holds in solution a certain quantity of magnesia and soda combined as sulphates, carbonates, and chlorides, and it has a peculiar effect on wood, causing it to ferment, and releasing the organic gases. Carburetted hydrogen is given off in its most offensive form, the odour being the same as that arising from the alkali swamps in wading through them when the water is low in the fall of the year. The only way to avoid this is to dispense with pine curbing, and, if possible, not to sink into the drift at all, as it is more alkaline than the lacustrine clay. There are considerable areas where the lacustrine clay as well as the sand and gravel are entirely wanting; there it is much harder to find good water. The drift or hard pan blue clay is of glacier origin; the other deposits just mentioned, lying on top, may all be wanting, but this never. It is often 100 feet deep and full of transported stone and boulders, especially at the bottom. It rests on a fine-grained, buff-coloured magnesian limestone of silurian age, which appears to be the universal bed-rock of the entire region.

In the remote past, but only as yesterday by the geologic clock, the continental portions of the Northern Hemisphere, as far south as the 40th parallel, were covered with an ice-cap. Ice rivers or glaciers poured from the north-west, grinding the rocks, and bearing along with them great masses of earth, gravel, and stone. The ice-flow over what is now the valley of the Red River left it covered with these masses of transported *debris*. Had the ice sheet melted off as suddenly as does the snow of one of our modern winters, there would have been no such level plain as that which now forms the greater part of the Province of Manitoba. But the glaciers were in no hurry to depart; they could only disappear as the rain and sun melted their southern skirts, and perhaps thousands of years elapsed from the time when they began to thin off towards the south till they had receded as far north as a line drawn east and west, along what is now the head of Lake Winnipeg. We can imagine how long they lingered on this line, behind which lay the great hollow that ends in Hudson's Bay. While thus on the move to the north their melted waters escaped to the south; but, in the depressions and water-worn channels and hollows a lake began to form, which grew in size as the ice-sheet melted and made room for it. When at length the glacier turned the ridge at the head of Lake Winnipeg, the waters found their natural outlet down the Arctic slope to Hudson's Bay, where they have ever since continued to flow. The change of currents involved in this change of outlet must have had a marked effect in determining the spread and deposition of the alluvium or river mud that now forms the surface covering of the valley. Before the new drainage system was established the channels would be shallow, and freshets frequent and far extending. At a certain height of the water in the Red River at the present day a great many tributary streams are dammed back, and their waters overflow—what must it have been when, perhaps for hundreds of years, there was only a partial outlet by Nelson River!

According to this theory, therefore, the alluvium comes from the rivers, the lacustrine clay from the lake, the sand and gravel from the drift, and the drift itself, the mother of them all, from the glaciers.

Having thus established our footing, so to speak, in the Valley of the Red River, we may now, before going further, look around and picture to ourselves what it is like at the present day. Traveling by the St. Paul, Minneapolis, and Manitoba Railway from St. Paul northward through the State of Minnesota, and for a long way down the American portion of the famous valley, which stretches to the right and left as far as the eye can reach, and for the most part as level as a billiard table, we arrive at Emerson, the "Gateway City" of Manitoba and the Canadian North-West. If I were writing a sketch of the American portion of the valley down which we have run (we say *down*, although it is towards the north, because the

water runs that way), I should have to speak of the great wheat factories—the bonanza farms; fields a mile, two miles square, ploughed from corner to corner, without a stone or a stump, and as mellow as garden mould. I should have to stop and describe an entire crop of towns, of which Fargo, Moorhead, Glyndon, Crookston, Grand Forks, St. Vincent, and Pembina may be regarded as the chief, all growing fast, full of life and western vim. But for the present I have most to do with the country north of the Boundary Line, first touched at Emerson, as yet the only entrance by rail into the North-West. When the Thunder Bay branch of the Pacific Railway is completed to Lake Superior, there will be another entrance from the east; and possibly before long other branch lines from the south will tap the Boundary Line at points west of the Red River.

Emerson lies in the corner formed by the Boundary Line and the east bank of the Red River. It is not a square corner, as the river intersects the line at this point obliquely, and it is in the acute angle that the town is built. It was founded in 1874 by Thomas Carney and William Newton Fairbanks, two American gentlemen, who had been in the town-building business before, and seeing that a town at this point was likely to do well, bought the site from Government at a dollar an acre—in all some 600 acres. When I first visited the town in 1878, it boasted of about a dozen buildings of all kinds; now, in the fall of 1880, it is an incorporated town, with a population of at least 1500, although it claims to have more, and its property is assessed at £100,000 sterling. For the purpose of building a bridge to bring the traffic from the west side of the river, the sum of over 40,000 dollars was borrowed on the credit of the town's debentures, and these were sold last October *above par*. The business streets are Main Street and Dominion Street; the latter, running due east from the river, is intersected about half way between the river and the eastern limit of the town by the railway, a branch of the C. P. R., connecting with the St. Paul, Minneapolis, and Manitoba Railway, and running north to Winnipeg—distance, 60 miles. At the intersection of Dominion Street are the passenger and freight depots and the Custom House. The railway yard, which encloses these buildings, includes some seven or eight sidings, and is over half-a-mile in length, beautifully graded and ballasted with fine grey-coloured gravel, brought from the "Ridge" east of "Dominion City," the first station above, or rather below, Emerson. The whole line down to Selkirk, as well as the main line east from that point, as far as it goes, is ballasted in the same way. I do not think there is a town in the Dominion, not even excepting Winnipeg, that has grown more rapidly during the last three years than Emerson. Most of the people are from Ontario. It has numerous stores, six good hotels, as many churches, two weekly newspapers, several large lumber yards, a grist and saw mill, a brick yard, a military company, a fire brigade, with a fire engine, and last, but not least, a brass band. As a rule, border towns in Canada and the States have earned, and

sometimes deserved, the reputation of being rough and lawless; but Emerson and the other boundary towns around it are signal exceptions to any such rule. I speak from experience when I say that a more orderly and respectable class of people than what constitutes the population of the "Four Corners," including Emerson, West Lynne, St. Vincent, and Pembina, would be hard to find anywhere. Thomas Carney, one of the founders of Emerson, is now its first mayor, and represents the new county of Morris in the local legislature. He is a real genuine type of a "Western man"—shrewd and honest. No stranger needs be afraid to approach or trust Tom Carney. Emerson is the chief of a quartette of towns that have sprung up at the intersection of the International Boundary Line with the Red River. On the opposite bank is West Lynne, established by the Hudson's Bay Company on their own land in 1879. It has grown with wonderful rapidity, though it is still a long way behind Emerson, with which, however, it maintains a spirited rivalry in the way of business. During the fall and winter of each year, nearly all the wheat raised on the west side of the river was marketed at West Lynne. This was chiefly on account of the difficulty experienced in driving loaded teams down and up the steep banks of the river, especially when the roads were soft. There was also the great inconvenience of crossing on the ferries. It is expected that the new free traffic bridge will divert most of the grain to the east side for storage and shipment by rail. There can be no doubt that the west side of the river at the Boundary Line is the best for a town site; and if Carney and Fairbanks could have bought from the Hudson's Bay Company, Emerson would have been on the west side, as that has the whole prairie region of Manitoba and the North-West as a tributary background; whereas, on the east side of the river, there is only a narrow strip of fertile plain. Still Emerson, with the railway, the bridge, and the determined energy of her people, may be able to keep the lead it has got for a long time to come.

South of West Lynne, and therefore in the territory of Dakota, is the fast-growing town of Pembina—not more than three years ago one of the most bleared and hopeless-looking collection of wooden shanties anywhere to be seen; now smart, trim, and new; full of life, business, and energy. Originally a post of the Hudson's Bay Company, and for many years the only settlement on the Red River for many miles up and down; built at the confluence of the Pembina River with the Red River, just as Winnipeg, another old Hudson's Bay post, is built at the confluence of the Assiniboine, Pembina has something of a history. But perhaps the most interesting portion of it refers to the three years last past. Owing to the extensive reservations on the Manitoba side of the Line—reservations for the Mennonites, and reservations for the half-breeds, not to speak of the extensive tracts held by speculators—our immigrants have hitherto been obliged to undertake a long and toilsome journey to get to the free homestead lands. The Land Regulations of the Government have also been blamed for arresting the tide of settlement; but so

long as land could be got handy in Minnesota and Dakota, settlers were not going to run the risk and expense of a long quest for lands on our side of the Line. Hence the unprecedented flow of immigration into Dakota and Minnesota, and the new life infused into the old perfunctory town of Pembina. More than a thousand Canadian families have settled in American territory, adjoining the Boundary Line, within the last two years; and, for my part, I cannot see that the Land Regulations had much to do with it. Here, at the terminus of the American Railway, were free lands in Dakota, and free lands, as well as cheap railway lands, in Minnesota. Is it any wonder that needy settlers, whose first object was to get a home, preferred to take the first that came to hand, especially when it was as good as anything they could get by going further away? On the Boundary Line, therefore, we have not only the same kind of land, but the people are, to all intents and purposes, the same. There are no conflicting interests, and border antipathies are unknown. The "Boys in Blue," from the military post near the town of Pembina, drive through the streets of Emerson, and spin along our Prairies, without leave or apology;—they like it, and so do we. Canadians go to Pembina and picnic with Americans; and even the local papers, in the utmost dearth of items, never mention it as being out of the ordinary course of events. At the Fourth of July celebration, in the grove by the Pembina River, last year, the Canadians who listened to the reading of the "Declaration of Independence," and the "Oration" that always follows, outnumbered the Americans—probably two to one.

Opposite Pembina, on the Minnesota side of the river, is the town of St. Vincent. It is by charter-provision the terminus of the St. Paul, Minneapolis, and Manitoba Railway. Trains are required to stop at a point on the Red River, opposite the mouth of the Pembina. The C.P.R. trains used to come to this point and take up the passengers, baggage, and freight from the South; but since the erection of the new depots at Emerson, the transfer takes place at that point, much to the satisfaction of everybody but the St. Vincent people. In the month of May, 1879, there was only one house in what before the following September was the town of St. Vincent, with several goods stores, large hotels, private dwellings, and graded streets. Among many other new buildings added during the past year has been a 60,000. dol. grain elevator. Neither St. Vincent nor Pembina come up to the Boundary Line; but they are extending in that direction, and it is pretty safe to assume that a large population will gather round the banks of the Red River at the Four Corners. It is just as safe to predict—not that this, that, or the other will take and keep the lead, but that the time will come when they will all be spoken of as one city.

The Red River Valley belongs, commercially and geographically, rather to St. Paul and Minneapolis than to Montreal and Toronto. From the former great and rapidly growing centres settlement has gradually and naturally radiated northward, and, therefore, the

country to the south of the Line, within the Red River Valley at least, has had the start in actual and legitimate development, and its progress has been more marked than that of Manitoba, leaving Winnipeg out of the question. Those who know the country best, if they speak the truth, will say that the Canadian North-West must be content to wait till Minnesota and Dakota are pretty well filled up; but that will not be long. This last year witnessed the filling up of an immense area of the north-east corner of Dakota and chiefly by Canadians, as we have already observed. The railways to the South, while they derive the profit, deserve also the credit of opening up the country, and they are advancing at a wonderful rate. "No day without a mile" seems to be their motto, so that what to-day would be a surprising account of their progress, and of the country they are so unceasingly developing, would in six months time be almost an old story. Those who saw Fargo, Glyndon, Grand Forks, and Crookston a year ago, would have some difficulty in recognising them to-day, such is the rate at which they are growing; and their growth is no less conspicuous than natural, being the result of actual settlement and cultivation of the country in their vicinity. As showing, in something like detail, the progress of North-West railway construction south of the Line, I would invite the reader's attention to the following remarks of the *Winnipeg Free Press*, a paper thoroughly unbiassed on the question of American railway enterprise:—"The statistics of railroad construction during the season of 1880 in the Territory of Dakota afford a good augury of what may be accomplished under favourable circumstances in the North-West Territory of Canada. The *St. Paul Pioneer Press* lately tabulated these results in Minnesota and Dakota, which, including 210 miles of the Northern Pacific west of the Rocky Mountains, amounted to 1,193 miles of completed road, and 424 miles of grading finished and ready for the iron. The great impulse in Southern Dakota is the competition between the leading Chicago lines for the travel and transportation of the Black Hills. Indeed, most of the aggregate is in Dakota, a law existing in the territory which authorises any railway company, organised in an adjoining State, to extend its branches and corporate franchises in any direction through the territory. Let us enumerate the Dakota extensions under this liberal and flexible provision during the season just closed. The Chicago, Milwaukee, and St. Paul has constructed 120 miles, in equal instalments, on lines verging to the Black Hills; the Chicago and North-Western has constructed 185 miles, with the same direction, from the western boundary of Minnesota in latitude 44° to the Missouri at Fort Pierre; the Northern Pacific has reached the boundary of Dakota and Montana, with a line of 135 miles from Bismarck on the Missouri, and the St. Paul, Minneapolis, and Manitoba, reports 48 miles from Breckenridge to Castleton, 75 miles from Fargo to Grand Forks, and 12 miles from Grand Forks to Ojata on a line projected to the Great Bend of the Missouri at Fort Buford. The aggregate is as follows:—

	Miles.
Milwaukee to St. Paul,	120
Chicago & North-Western,	185
Northern Pacific,	135
St. Paul & Manitoba,	135
	<hr/> 575

The Chicago companies—the two first named—have even greater distances, an aggregate of 348 miles, fully graded and ready for the iron.

As the Canadian parties interested in the St. Paul and Manitoba Railway are likely to be connected with the extension of the Canadian Pacific Railway to the Rocky Mountains, our readers will be interested in a more detailed statement of the transactions of that company during 1880. The extent of new construction is 224 miles, 135 miles of which, as already stated, is in Northern Dakota; but, in addition, the company has re-laid 210 miles of track with steel rails, re-forming grades and alignments, and investing largely in rolling stock and permanent structures. It is no exaggeration to state that the extraordinary expenditures for the renovation of the track and the enlargement of business facilities are tantamount to the construction of an equal distance of new railway track. Equal energy by a Canadian railway syndicate would connect the channels of the Red River and the Saskatchewan in a single year.

There was never any attempt to meet the argument of Mr. Donald A. Smith, that the St. Paul and Manitoba Railway had the highest commercial interest in filling Manitoba and the Northwest Territories with population, and that all railway officials had received instructions to facilitate in every way possible the transit of Canadian emigrants, and, in consonance with such a liberal policy, we now have authoritative information that the directors have made a standing order that all consignments to Manitoba and interior districts of Central Canada shall have precedence of all other freights in transmission to their destination. Such was usually the practice of the company, but about three months since, with special reference to the exigencies of the season and the delays upon eastern lines, it took the form of a peremptory order from the general freight agent at St. Paul.

It is a grand mistake to imagine these great colonisation railways as mere grinding land monopolies. As a matter of fact, they calculate very little on the profit they make from the sale of their lands alone. What they aim at most of all is the filling up of their territory with industrious and prosperous settlers. It is labour that makes the land productive, and the producer pays to the railways a yearly tribute which, in many instances, exceeds the profit from the sale of the land. To encourage settlement, the St. Paul Minneapolis and Manitoba Railway rebate *three dollars* an acre for every one brought under cultivation, so that the price of the land to an actual settler, considering all the advantages of being near a railway, is a more nominal one after all.

From Emerson to Winnipeg we have our choice of three routes—by rail, by road, or by water. The quickest is by rail over the Pembina branch of the C. P. R., now as good a road as any on the Continent. The distance is 60 miles, and the run can be made in less than two hours. The train from the south arrives in Emerson between five and six o'clock in the evening, and, after a halt of 20 minutes for refreshments, starts for Winnipeg. The first three miles of the road is through a rich, undulating country, and we pass two fine farms, a wide, deep *coule*, and then the Valley of the Jo River, both of which are spanned by long trestle bridges, as yet only of a temporary character, but soon to give place to substantial iron structures. The first station we come to is Dominion City, a small village at present; but, as the centre of a fine settlement along the Rosseau River, crossed by the railway at this point, it is certain to become a smart country town. The other stations on the line are Arnand, Otterburn, and Niverville. Finally, we reach St Boniface, on the Red River opposite Winnipeg. The Louise Bridge across the river at this point, which is built at a cost of 200,000 dollars, will afford access to the heart of the city, and obviate the disagreeable necessity of crossing on the ferry. The country all the way down is for the most part a uniform level prairie, a good deal of it rather wet in the spring and early part of the summer, covered with rich grass, with here and there a belt of woods along the streams, and patches of willow, oak, and hazel scrub. The greater part of it is at present too low and wet for cultivation, but forms one of the most magnificent stretches of pasture land to be met with in the North-West; and, lying as it does along a railway, could be very profitably utilised for stock-raising—an enterprise which is being developed to such a wonderful extent on the arid pasture lands of the United States to the south and west, that, vast as the area of such lands is, the best locations are said to be nearly all taken up. These north-western lands of ours are in every respect superior to those of the Americans. Thousands of tons of rich natural grass can be cut and cured for winter fodder at a trifling cost, while grazing on the land held by speculators will be free for many years to come. It is to be noted, too, that as soon as our Thunder Bay branch is completed to Lake Superior, our facilities for shipment to the east will give us an immense advantage. Hence we look for the speedy growth of an enormous live-stock business in Manitoba and the North-West.

Another very pleasant route from Emerson to Winnipeg is down the Red River in one of the towering stern-wheel steamboats of the Winnipeg and Western Transportation Company. These boats leave the bank of the river at the foot of Dominion Street every alternate evening; and on a moonlight night it is a novel experience to walk the upper deck and watch the serpentine course of the river and the wild Indian look of the wooded banks.

“ Out and in the river is winding
The links of its long red chain,
Through belts of dusky pine-land
And gusty leagues of plain.”

So tortuous is the course of this river that it more than doubles its journey, measuring the distance in a straight line. Its average width is about 350 feet, and the banks, at low water in the early spring and fall, are from 30 to 60 feet in height. Here and there, during the first half of the downward passage, more frequently as we approach Winnipeg, may be seen the log-house of a French half-breed, the river front being his chosen preserve, as it affords him fuel in winter and fish at nearly all seasons. A strip of land along each bank all the way down to the lake, and extending from two to four miles into the prairie, is called the Settlement Belt, and was reserved for the use of the half-breeds at the time of the transfer of the country from the Hudson's Bay Company to Canada in 1870. Their claim to a river lot is founded upon actual occupation, or purchase of the rights acquired by occupation, previous to the date of the transfer. Portions of the river front, especially below Winnipeg, have been occupied for nearly a century—first by the original Scotch settlers brought in by Lord Selkirk, and then by their half-breed descendants. The old custom was for each settler to stake off a portion of the river front, put up a log shanty on it, and make it his home during the intervals of the buffalo hunt. This was all that was required to give possession under the old *regime* of the company. It was not the possession of fee simple, but it was all that was looked for or cared for by the first settlers or their half-Indian descendants down to the time of the transfer. There was no land fever in those days, and no one coveted a wide frontage; hence we observe that the houses within twenty miles north and south of Winnipeg are almost as close together as in many a straggling village. These river lots are now all surveyed and numbered. Accurate maps, showing the course of the river and the character of the banks, with the number and size of the lots, have been prepared by the Department of the Interior; and lithographed copies of these, in sections named after the parishes into which the Church for its own wise ends has seen fit to divide up the Settlement Belts, may be purchased at the Surveyor General's office in Ottawa for eight shillings each. The river lots are all narrow, ranging from three to twelve chains in width. How they came to be four miles long, as most of them are, is as follows. At the time of the transfer, the half-breeds, or rather some of their long-headed friends, made representations to the Government that the two miles of depth, which it was originally intended they should have, would not be enough for hay and pasture, so they were allowed in most cases a depth of four miles. As many chains, for all the use they make of the land, would have done them as well. A great many of them have parted with their claims; and the time is not far distant when the river fronts will be in the possession of practical farmers, who well know what use to make of the superlative soil of which they are composed. A farm on the river, having a frontage in any degree corresponding to its depth, would make a splendid estate. Widths of from six to twelve chains

can be picked up here and there at from \$5 to \$12 an acre. The Assiniboine, which flows into the Red River at Winnipeg, was settled by the half-breeds in the same way for sixty miles westward from its mouth, and the Settlement Belts on both banks are of the same general character; the lots are arranged and numbered, and the parishes laid down on maps similar to those of the Red River.

There is still another route from Emerson to Winnipeg, along the river on the west side, which, if the traveller has the time to spare, and the roads are in anything like fair condition, he will enjoy perhaps more than the other two just described. For this trip he will have to hire a light gig at the livery stables, with a driver as guide, which will cost from three to four dollars a day, besides the expenses of board and lodging on the road. By this route there will be many opportunities of observing the depth and richness of the soil. At Plum Coulee, and near the town of Morris, some splendid farms will be seen. The Low farm, of 18,000 acres—the first experiment in wholesale wheat manufacture in Manitoba—lies a few miles west of Morris, and is worth a visit. It is still a long way behind the bonanza farms of Minnesota and Dakota—not from any inferiority of the soil or location of the land, which could not be surpassed anywhere in the North-West, but from the fact that the necessary labour and capital have not yet been expended upon it. The road to Winnipeg runs for the most of the way through the Settlement Belt. Sometimes it approaches the river, and skirts along the wooded banks; while to the left stretches the limitless prairie, level as a floor for the most part, but sometimes undulating, and with a slight inclination towards the river. The town of Morris, at the mouth of Scratching River, is fast becoming a place of importance. The population is now something like 600. It has four churches, with resident ministers; as many hotels, offering the best accommodation; an equal number of very good general stores, and a new school-house has just been built, at a cost of 2500 dollars. The town is very anxious to secure railway connection with Winnipeg and the country south of the Assiniboine, by means of the South-Western Railway, but it is doubtful if it can offer sufficient inducements to draw the line so far south. It would be a great point to get the railway; and Emerson—to which a charter to build a line west to Turtle Mountain was refused last year—is bitterly opposed to her neighbour having the start of her in this respect.

North of Morris a few miles the river banks are more thickly settled, and the farms are larger and better cultivated. At Stinking River, or Riviere Salle, we reach the village of St. Norbert, which boasts of a church, a convent, a grist mill, several stores, and a number of good frame buildings. Near this place we leave the prairie behind, or rather out of sight, having entered a belt of woods much broader than what lines the bank to the south, and continuing until we nearly reach the Assiniboine, some thirteen miles further down. Crossing this river by the rope-ferry, a few hundred feet above its confluence with the Red River, we are landed on the high

bank where stood, until last year, the famous Fort Garry, now demolished to make room for an establishment more suitable to the times. I might continue the description of the river banks from Winnipeg down past Selkirk to the lake, but there is no very striking change to note, except that the settlements are older, and more historic, the half-breeds are Scotch and English, and some of their grandfathers, the "squaw men," will tell you they left Scotland before the battle of Waterloo, and cropped their little farms ever since without manure, which, in order to get rid of, they used to haul on to the ice of the river, and let it float away in the spring. The Red River is wider below Winnipeg, after receiving the waters of the Assiniboine, and, strange to say, the alluvial deposit begins to get shallower as we near Selkirk. From a point 100 miles to the south of Emerson to within 12 or 15 miles of Selkirk, the water has to be very low in the spring and fall, before the boulders of the drift begin to show, but here they crop out along the banks under a very few feet of the surface covering. About four miles before reaching the "Stone Fort," or Lower Fort Garry, the curious traveller may stop, if he has time, and examine what there is good reason to suppose are the most northerly remains of the "Mound Builders." There are six mounds in this locality, and there can be no question that they belong to a period when the whole continent to the south was peopled by a race whose origin and fate may still be regarded as the great problem of pre-historic America. Dr. Schultz, M.P. for Lisgar, in which the mounds are situated, made a careful examination of them, and described them in a letter to the *Winnipeg Free Press* some time ago, from which the following extract is quoted:—

"The mounds here have been built near the dwellings of the builders, who employed fire to render them durable; the upper crust of soil seems to have been removed, and on the flattened clay floor an oven-shaped roof of the same material has been erected; intense heat being then applied gave consistency to the arched roof, and, if sprinkled with sand, would cause the vitreous appearance the roof and floor show. The dead, placed in rows, were in a sitting posture, with the hands folded and the face toward some cardinal point of the compass. Food was placed in earthen dishes before them, and upon them were hung their ornaments. There is, however, a curious absence of weapons, and the skulls show no sign of violence, though in the neighbouring fields stone hatchets and war clubs, as well as flint arrow heads, have been found. The skeletons show no peculiarity of stature, but the crania differ widely from the Cree and Ojibway branch of the great Algonquin family now found here. The skull now before me is of average Caucasian size, and the well-worn teeth show middle age as well as the nature of the food. The forehead, though somewhat narrow, is neither low nor receding, orbits well rounded, superciliary ridge low, malar bones only moderately developed, zygomatic arches slight, nasal bones prominent, and occiput fairly rounded, and in other peculiarities differing from the typical Indian skull of living races. The ornaments consist of necklaces formed of hollowed tubes of the soft stone used by the present Indians for pipes, and shells variously cut and pierced for earrings, and some, from their size, suggesting breast ornaments. These shells are unlike anything found here, and similar ones sent by the Hon. Donald Gunn to the Smithsonian Institute were found to be of a kind found only on shores of the Gulf of Mexico. The lottery has apparently been made with clay of this country, and was con-

finned to simple forms, and the remains of food found in them were the bones of the beaver or some other small animal, and the shells of the present river molluscs. None of this group of mounds seems to have been connected with others, and the surface appearance is the same, with the exception, of course, that on some large trees are growing. Our own Indians have no traditions at all in regard to them, and their implements and ornaments are alike strange to them, and the practice of the present and preceding Indians was to dispose of their dead on elevated stages rather than to inter them."

The Stone Fort, an important post of the Hudson's Bay Company, occupies a commanding position on the bank of the river. A few miles further down is the town of Selkirk, where the C. P. R. was to have crossed under the old *regime*. Two or three miles east of the town the Winnipeg branch joins the main line, now completed as far east as Rat Portage on the Lake of the Woods. At the junction a town has been laid out on paper, and there are some important railway buildings, including a large and substantially-built Round House. Still further down the river, and through a belt of woods, we enter St. Peter's Indian Reserve, whence the country begins to sink into the delta—an interminable maze of lagoons and marshes, the chosen haunt of myriads of water-fowl.

This is, perhaps, the place to say a few words about the country east of the "Ridge." Some reference has already been made to the country east of the Red River as far as the Ridge; but east of the Ridge we enter a region which has no counterpart in any other portion of the continent to the westward—a region of which the most general description that can be given is, that it consists of burnt rocky ridges, with flooded marshes and muskegs intervening, forming the lower and eastern portion of a vast area, occupied by the laurentian series of rocks, which extend, with various ramifications, from the Labrador coast to the east shore of Lake Winnipeg, where they turn south to Hudson's Bay. Within the folds of these granite laurentides there are said to be a thousand lakes; but it is only of a limited area of this eastern portion of this vast system that I have anything to say.

Everyone has heard of the north-west angle of the Lake of the Woods. It is the most northerly point in the United States, being in latitude $49^{\circ} 23' 54''$, more than 25 miles north of the International Boundary Line. How this point came to be established, and how it remained established so far north of the 49th parallel, are questions of some interest, involving the curious fact that the United States hold a block of about 120 square miles within the territory of the Dominion of Canada. By the wording of the Treaty of Paris in 1783, the Boundary Line west of Lake Superior was made to run through the water system of which Rainy Lake, Rainy River, and Lake of the Woods form part; and then passing through the centre of the Lake of the Woods, the Line was to run "to the most northern point thereof, and thence, in a due west course, to the river Mississippi." But when the Boundary Line was finally settled by the Ashburton Treaty in 1842, they had learned

by that time that the "river Mississippi" had no existence so far north as to be cut by a line running due west from this most north-westerly point of Lake of the Woods. Nevertheless, this point was stuck to, and a perpendicular was dropped from it to latitude 49. This perpendicular is over 25 miles long, and cuts off to the east of it that block of 120 square miles already mentioned. The old trail to the "North-West Angle," which runs south-east from Winnipeg, must have been a terror to the few travellers whose necessities compelled them to cross it. But the Lake of the Woods can now be reached by the Pacific Railway, which is now running as far as Rat Portage, over a hundred miles east of Selkirk, and, if we are not greatly mistaken, the travel in this direction will very soon be a surprise to most people. The country immediately north of the Lake of the Woods is altogether unfit for settlement, being a mere succession of bare rock and swamp; but along the north bank of Rainy River, which connects Lake of the Woods with Rainy Lake, there is a belt of some ninety miles in length of the choicest land. The whole of the frontage of this fertile belt is accessible to steamers from Lake Francis to Rat Portage without interruption or transhipment, as there is always plenty of water at all seasons during navigation, and the navigation is perfectly safe. There are other fertile spots in this region, long known as such, and it is but reasonable to suppose that others will be discovered. The Hudson's Bay Company have a farm at Lake Francis, which has been under crop for 45 years; and such is the richness of the soil that it has never received nor required manure, which has been accumulating on the premises all that time. As soon as the railway is completed to Thunder Bay, all this country will be accessible both from the east and west; and such are its advantages as an agricultural, mineral, and lumbering region, that it will very soon fill up. But it is more particularly of the mineral resources of the country that I wish to speak. The whole north shore of the Lake of the Woods is a complete labyrinth of bays, peninsulas, and islands, and dips into the southern edge of the later formations of the laurentian system; and this circumstance is favourable to the presumption that the precious metals may be found here. That gold has been found does not admit of a doubt. It has been ascertained that there are several thousand islands in the Archipelago, which stretches some fifty miles across the northern portion of the Lake of the Woods; and in quite a number of these veins of auriferous quartz have been detected. Most of the islands are rocky, with bluff shores; but there are some that could be cultivated, and would make tolerable farms. The prevailing rock in which gold has been found is slate, trap, greenstone, and gneiss. The ore is said to be susceptible of complete and satisfactory treatment by the simplest methods known to quartz milling; but the proprietors—of whom I have met several—being men of limited means as well as experience, have so far not been able to do much in the way of testing the value of their discoveries. Neither mercury nor fire-tests have as yet been attempted. The method of

prospecting, so far, has been to cruise about in a birch-bark canoe among the islands, and stop whenever a quartz vein became visible. If, by the rudest assay, a trace of gold was found, the location was secured; if not, it was pronounced worthless. We have not yet heard of any capitalist investing in claims or in milling; but this may be owing to the uncertainty which prevails as to the title to the land, the question not yet being decided whether the country belongs to the Province of Ontario or the Dominion of Canada. If this point was once settled, capitalists would, no doubt, be found ready to purchase claims, as well as operate mines. I have seen a specimen taken from a quartz vein on Hay Island, which was excavated a few feet; it was a cube of about six inches, and would contain from fifteen to twenty dollars' worth of gold visible on the surfaces alone. This enormously rich prospect was discovered by a Mr. Thomson and a man who was working with him last spring. Coal has also been discovered in two places south of the verge of the primary formation, in what has been described as a Devonian measure. It is said to resemble the much-prized Albertite coal of New Brunswick; burns freely, and leaves only a small quantity of yellow ash. Upon the whole, I do not know any country that offers better inducements to the hardy and enterprising settler than some portions of the "Water Stretch," particularly the fertile belt north of Rainy River. In the first place, there is land enough, of the very best quality, to give farms to at least 5000 people; then the water-stretches will very soon develop a transport trade in produce, lumber, and minerals, including coal; and, lastly, there is gold mining, which, without giving credit to one-tenth of what has been told of its fabulous prospects, may be justly regarded as one of the most promising industrial features of the country.

Our great Canadian newspaper, the *Globe*, sent out a Special Commissioner last summer to explore and describe the country along the route of the C. P. R. between Cross Lake and the terminus at Thunder Bay. The gentleman selected for this purpose, Mr. W. H. Williams, of Toronto, had been over the Dawson Road through the same country in 1874, and from other experiences in the North-West and some of the wilder portions of Canada, was eminently qualified for the arduous commission he undertook, as his able letters to the *Globe* sufficiently testify. Before his departure on the 1st December last, on another similar expedition, Mr. Williams wrote, at my request, the following brief synopsis of his observations with regard to the Rainy River and Lake of the Woods Country:—

"Toronto, 30th November, 1880.

"DEAR SIR,—I have much pleasure in complying with your request to furnish you with a brief separate account of the Rainy River and Lake of the Woods country, with a view to publication in your *Sketches of the North-West*. Regarding the Rainy River country, about which comparatively little is known even in Ontario, it would be difficult to speak too highly. The greatest drawback it has is simply that there is not enough of it. By itself it can never attain to any great prominence, as a good sized colony of a dozen townships would fill it all up, at least as much of it as is known so

far, though I am of opinion that it will ultimately prove to be of much greater extent than has been hitherto supposed. It is now about 90 or 100 miles long, fronting on the north bank of Rainy River, and as nearly as I can learn this belt of choice land is known to extend back from the river to a depth of from 12 to 15 miles. Lumbermen have told me, however, that though they have come upon occasional muskegs at the limit named, they have found many of them very limited in extent, with good land beyond them. This good land is as desirable for agricultural purposes as any I have ever seen. The surface is a rich black loam, from two to four feet deep, and beneath this is a bottom of clay and sand, easily drained, and always ready to absorb surplus moisture. It is covered on the high lands with a rich growth of light young timber, easily cleared away, though quite stout enough to make good log out-buildings and settlers' shanties, while a considerable portion of it can be hewn into light timbers or sawn into lumber. In the bottom lands, which are much more limited in extent, however, are high elms growing in broad grassy glades, that at first sight look like stretches of well-kept park. At Fort Francis, in 1874, I saw one of the finest fields of wheat I have ever met with; it was on the H. B. Coy.'s farm, which had been under crop for forty years, and during all that time the manure had been accumulating and rotting away in the barn-yard, not because their farmers were not intelligent enough to understand its value, but because the land had never required it. For forty years these rich fields had yielded crop after crop, and yet they showed no signs whatever of exhaustion. It may puzzle the uninitiated to understand how it is that such very rich land grows such light timber, and I must confess I was puzzled myself at first. I think, however, that the very richness of the land is accounted for by the absence of large timber. Anyone who has seen the tremendous havoc that forest fires make in this country can readily understand that this region has been burnt over from time to time, leaving the ashes and *debris* to rot and enrich the soil, from which a second growth of surprising vigour would soon spring up; but before any of these succeeding growths could attain to the magnitude of heavy timber, another bush fire would mow it down again, adding one more to the many rich layers of vegetable matter with which the country is overlaid.

A great advantage possessed by the Rainy River country is that it is now very easy of access, and will be much more so as soon as the Thunder Bay and Winnipeg Division of the C. P. R. shall have been completed. Rat Portage on the C. P. R. is on the Lake of the Woods, just where it falls into Winnipeg River. A steamer can take freight or passengers from the railway at this point, and steering almost due south through the most lovely and picturesque scenery on this continent, reach the mouth of Rainy River after a run of about 70 or 80 miles. The traveller has then reached the western end of this fertile belt, which, as I have already stated, is some 90 miles in length. The tugs run up this whole distance, and can land passengers at any point on the way up. At Lake Francis there are a saw-mill, a flouring mill, and two or three traders on the Canada side, and one or two settlers on the Minnesota side of the river. In addition to its accessibility from the outside world, this region cannot fail to be valuable as a source of supplies for the very promising gold fields among the myriads of islands in the northern part of the Lake of the Woods, as well as for the coal fields along the north shore of Buffalo Bay.

"I could not attempt to give you, within the compass of a letter, anything like an adequate account of the Lake of the Woods, and my numerous canoe voyages prospecting for gold among the countless islands that stud the northern part of the lake and its extensive bays. The following extract from one of my letters to the *Globe* gives a better description of the Lake of the Woods than anything I can now write, and I beg you to accept of this, as well as of the subsequent account of a 'gold island,' which is more or less a sample of what I could say of all that I visited:—

"Lake of the Woods is very irregular in form, by far the greater portion of it lying north of the 49th parallel, and its most northerly point running

up to within about a quarter of a degree of the 50th parallel. Measured in a north-easterly direction from the extremity of Buffalo Bay to Rat Portage, it is about 75 miles long in a straight line, and at right angles to this it has an average width of some 25 or 30 miles, though this distance would come very far short of spanning it in its widest place. A very large part of the southern portion of this lake is bounded by low sand-banks and marshy bays, both falling into a band of swamps as they recede inland for a mile or ~~two~~ and then comes higher ground thickly timbered. Near the mouth of Rainy River, which falls into the lake near the south-east angle, there is a high bluff shore of yellow sand, and behind this the ground recedes into extensive swamps and muskegs. The southern portion of the lake is open and comparatively free from islands, while the marshes along the southern and western shores afford a sportsman's paradise in the fall, when they are literally swarming with ducks of all kinds, geese and swans. The northern portion of the lake, however, dips into the southern edge of the Laurentian range, and is literally full of islands, most of which are rocky, with bluff shores, though some contain extensive areas of good arable land. In fact, this portion of the lake is a perfect labyrinth of peninsulas and islands interspersed with extensive stretches of wild rice and bulrushes and marsh-hay. Shoal Lake, a very large body of water, is on a level about two feet higher than Lake of the Woods, and is connected with it by a broad stream which falls into the latter at Ash Rapids on the western boundary, about 25 miles south-west of the commencement of Winnipeg River. North of Ash Rapids, and extending away to the westward is an arm of Lake of the Woods, called Ptarmigan Bay, and north of this, and connected with it by narrows, is another long arm of the lake, nearly parallel with the bay already mentioned, called Clear Water Bay. South-east from the mouths of Clear Water and Ptarmigan Bays is a broad opening in the eastern shore of the lake, which opens into Whitefish Bay, itself a very extensive body of water, which extends southwards some thirty-five miles, till it all but communicates with Sabaskong Bay, a broad and deep indentation of the eastern coast of the lake, forty miles north-east of the mouth of Rainy River.

Passing the eastern extremity of Hay Island, where there are several unprospected mining locations, we headed in a north-easterly direction to Minnesahbik, a small island which has been located by Mr. Gibbins. This island contains about nine acres, and on it are two small but well-defined quartz veins, which cut the strike of the country rock nearly at right angles, like true fissures. These veins are about fifteen inches wide, and show some 150 feet along the surface. From both of these I broke numerous pieces of quartz, showing fine specks of free gold, and I had no difficulty in washing very promising shows of fine gold dust from the dirt scraped up where the vein had been partially decomposed by the action of the atmosphere. I had no means of testing the actual value of this ore, but from what I saw I should suppose it to be very rich. Mr. Gibbins has located Bold Island near Minnesahbik, which is said to have yielded some very fine shows of free gold, but as my time was very limited I did not visit it. Taking a south-westerly course we paddled about three and a half miles to the north shore of Hay Island, landing at one of the most famous locations in this region. This is the property of Messrs. Thompson, Chitty & Heenan. Here I found a vein about eighteen inches at the surface, and cutting the rock almost vertically it runs down into the water, being some twenty-five inches wide at the water line. Inland the vein cuts across a small point about 150 feet wide and then reaches the water again. This vein is composed of dark watery-looking quartz, talcose slate, and a sort of rusty dirt tinged with considerable quantities of decomposed iron matter. The vein has been excavated for a length of about six feet from the edge of the bluff down to the water line, which gives a depth of some nine or ten feet to the excavation. I swung myself down into this excavation with some difficulty, and found no difficulty in chipping out numerous specimens of free gold. I could also see some beautiful 'shows' sticking in the vein, when I left it, the finest of these, I should judge, containing nearly or quite two pennyweights in one spot.

"In conclusion, let me say that if you could prevail upon a number of your hardy young countrymen, with some means, to settle in this Rainy River country, they would live to be grateful to you for your trouble. I do not know a spot I would sooner settle in, if I had the means to farm and build a boat.—Yours sincerely,
W. H. WILLIAMS."

With regard to the present settlements and the future lumbering and milling prospects of this eastern portion of the Great North-West, the following additional information is from another *Globe* correspondent:—"The mills of the Keewatin Lumbering and Manufacturing Company are located at the western outlet of the Lake of the Woods, and about three miles distant from Rat Portage. This new village—for the settlement around the mills is increasing so rapidly that it is entitled to this name—is now a rival to the older settlement of Rat Portage, which has gained its principal importance from having been made the district headquarters of the Pacific Railroad construction staff. In a few years this new point—Keewatin, as it has been named—will no longer condescend to view Rat Portage as a rival. Keewatin—as it is now spelt in all Government documents, and not "Keewaydin," as it should be according to Longfellow—is about 125 miles east of Winnipeg, 100 miles east of Selkirk, and 300 miles west of Thunder Bay. There is a station of the Pacific Railroad at Keewatin, and already it has become an important shipping point, indicative of its future greatness, when enthusiasts say it will be the Minneapolis of the Canadian North-West Territories. At Keewatin the 'head' of water is, on the average, twenty-one feet, and the quantity which falls is possibly slightly in excess of the volume which dashes over the Chaudiere Falls at Ottawa. In fact, this is the greatest water-power along the whole line of the Pacific Railroad in the North-West Territories. There is a small water-power at the crossing of the English River, but nothing to compare with this. There are large and important water-powers in the North-West Territories, but they are all remote from the Pacific Railroad. It is for this reason Keewatin will, it is believed, become the Minneapolis of the North-West Territories. This is the point where a large portion of the wheat grown in the North-West will be ground before shipment to the Canadian and European markets, just as American wheat is ground at Minneapolis. Already negotiations have been opened with the Hudson's Bay Company for the purchase of a site and water-power at the eastern outlet of the Lake of the Woods for the erection of a large grist mill, not to carry on a mere local trade, but to grind for the world's markets, as soon as the Thunder Bay branch is open for through traffic. Keewatin has already become the centre of lumber manufacturing, and soon will obtain a more than local celebrity. The Keewatin Lumbering Company's mills have been in operation all the summer, and the Company have cut and built five large permanent trestle bridges for the Canadian Pacific Railroad. Messrs. Brandenburg & Co., who have large lumber mills at Knife Falls, on the St. Louis River, near Duluth, on the American side of the Boundary Line, have entered

into partnership with Mr. W. J. M'Auley, of Winnipeg, for the purpose of erecting and operating a lumber mill on the site of the old Rat Portage. The capacity of this mill, which is now in course of erection, will be five million feet per season. The capacity of the mill at Keewatin is about twenty million feet. It is rumoured that the Pacific Railway Syndicate will establish district workshops at Keewatin for the Pacific Railroad. The development of the territory around the Lake of the Woods promises to be very rapid as soon as through trains are running over the Thunder Bay Branch Railroad. Already the railroad construction has given an impetus to Rat Portage, where fifteen or twenty houses are being erected at the present time, and a similar number at Keewatin village, needed for the workpeople congregating around the mills. There is no agricultural land of any extent throughout the district—it resembles very much the township of Wakefield, on the Gatineau River. What land there is is fertile, but the maximum extent of each patch is two or three acres. It can never sustain an agricultural population. The future of the territory depends upon its supporting a large manufacturing and mining population."

We shall now retrace our steps to Emerson, from which point we have still to diverge on an important round trip through South Manitoba; but, before commencing the journey, I have something to say about how the country is surveyed.

The uniform square survey of townships, as adopted in Manitoba, the North-West Territory, and the Western States of America, is the simplest in the world; and by the slightest effort on the part of the reader he may master the details of the system, and thereby follow the descriptions of the country with more intelligence and satisfaction to himself.

The 49th parallel of north latitude forms the International Boundary Line between the United States and Canada, from a point in the perpendicular drawn from the north-west angle of the Lake of the Woods, west through the Prairie region, and over the Rocky Mountains to the waters of the Pacific. This line, astronomically laid down by the Boundary Commission, is marked by iron posts one mile apart, and forms the first base line of the township surveys of Manitoba and the adjoining territory. Lines running parallel with this base, exactly six miles apart, divide the country into tiers of townships. Some twenty of these tiers have already been laid down over a portion of the country, and their number will be extended north, and their continuation west, as settlement advances in these directions. Other lines, running north and south, cut the former at right angles. These lines are also exactly six miles apart, so that the whole surveyed part of the country, is divided up like a chequer-board, each square being exactly six miles each way, and therefore containing 36 square miles, or 23,040 acres. Each square mile, or 640 acres, is called a section, 320 acres half, and 160 acres a quarter section. It is one

of these quarter sections, along with the right to pre-empt or purchase another quarter, that the Homestead Act of Canada allows to every *bona fide* settler over 18 years of age. The lines running east and west, as has been said, divide the country into tiers of townships—those running north and south into ranges, which are numbered east and west from the "principal meridian," another base line running a little to the west of the Red River, and about $97\frac{1}{2}^{\circ}$ west of Greenwich. With a little experience in travelling over the prairies, one can always tell where he is, and with a compass can steer his course with perfect safety over all surveyed territory, for the sections and quarter-sections are staked, and the stakes show the number of the township and range. Under this system any section or sub-division of a section may be described in few words, and without the possibility of mistake. Hence, deeds and mortgages are of the simplest imaginable form. For instance, in conveying the north-west quarter of section 3, township 4, range 5, the description in the deed would run thus:—"All and singular, that certain parcel or tract of land and premises situate, lying, and being in the Province of Manitoba, in the Dominion of Canada, known and described as the north-west quarter of section number three, in township number four, range number five, east of the principal meridian in the Province aforesaid, containing, by admeasurement, one hundred and sixty acres, the same more or less." The topography of each township is given in the surveyor's field notes, on file in the Land Office at Ottawa. There is also on file a coloured map of each township, showing the character of the surface, the areas of timber, prairie, marsh or hay-land, the rivers, roads, ridges, and gulleys, &c., &c. These maps, with the surveyor's field notes, are of great importance in ascertaining the quality of the land to be purchased or located. The Government are now so convinced of this fact, that they have decided to print, by the photo-lithographic process, the maps of all the townships newly surveyed and to be surveyed, and to supply the different land offices with them. The price at which these maps are sold to the public is two shillings each. The maps of the earlier surveyed townships of Manitoba will not be printed, but copies may be obtained, made by the draughtsmen in the office of the Surveyor-General, at a cost of from eight to twelve shillings each.

Extending our radiations from the Gateway towns on the Boundary Line, intersected by the Red River, we ask the reader to accompany us in a round trip through the Mennonite villages to the Pembina and Turtle Mountains; from thence northward to the Assiniboine at Grand Valley, across the plain of the Souris, up the valley of the Little Saskatchewan; from thence to Shoal Lake, and then back to Winnipeg by the north trail.

In the early spring, the snow having melted without rains, as it usually does,—the roads once dry, and the prairie grass burnt off, we

have a month of most delightful weather for travelling, when a spin over the plains is one of the luxuries of existence. After the June rains it is not so enjoyable, as the roads are then at their very worst; otherwise, the bright green of the sprouting grass, the scented air, and the steady, wholesome breeze, begotten a thousand miles away to the west, have a wonderfully exhilarating effect on the spirits. It seems impossible for Dull Care to intrude his companionship on the prairie.

Crossing the river at Emerson by the new traffic bridge, and passing through what remains of the once heavily-wooded belt on the left bank, we enter at once on the plain in the Settlement Belt, and then pass into township one, range two, east; keeping the "Post Road,"—so called from the posts set up at intervals to mark the way for the Mennonites,—we bowl along due west, about a mile north of the Boundary Line. The general character of this township is beautiful rolling prairie. To the right, some three miles distant, is the wooded belt of Riviere aux Marais, consisting of oak and basswood, with some scrub bushes, affording shelter from the north-west winds, as the Red River Belt we have left is a screen from the east winds. There is a small lake, occupying portions of sections 11 and 14, called Lake Louise, about a mile and a quarter in length by 800 yards in width. With this exception, and one or two areas of depression, very good for hay, the whole township could be turned into the finest garden; but, unfortunately, very little of the land is farmed, being held by speculators at from five dollars to ten dollars an acre. The soil is deep alluvium, resting on lake clay, and water can easily be found by digging a few feet. The township next in order west is also a fine undulating tract, with the Marais River winding through its centre from the south, across sections 8, 9, 16, 22, 26, and 25; where it enters the township we have just left, and, passing north-east, empties itself into the Red River. We are now in the Mennonite country;—all the way along on the left, about a mile or more south of the post-road, is the heavy oak-timbered belt lining the banks of the Pembina River, and in the south-west begins to loom up, like a cloud in the sky, the face of a new plateau, still many miles distant, and to which the name of Pembina Mountain has been given. The wooded belt of the Pembina River runs up to a point, and touches the Boundary Line about 16 miles west of Emerson. The place is known as "Smugglers' Point." Here we may stop, and feed the horses at the "Travellers' Home,"—a tavern kept by a Canadian-American. It is in the territory of Dakota, but that makes no difference. Turning the "Point," the prairie runs into a deep bay in the woods, and suggests shelter, and the finest situation for a farm that could be thought of. There are, as one would naturally expect, some very choice locations here, and in other similar projections of the prairie into this fine wooded belt. But for the rest of the day's ride, we shall see nothing to the right but a wide stretching plain, dotted over with the villages of the Mennonites. We shall pass through their streets, and, for the novelty of it, enter one of their houses. Before doing so, we may observe that the village

consists of one street—perhaps a quarter of a mile in length—with the houses gable-end to the street, and apart fifty or sixty feet from each other. Between the gable-end and the roadside fence, which is usually a single bar, resting on posts about two and a half feet high, is a space of from twenty to thirty feet, cultivated with great care by the women as a flower garden, which, later in the season, will be full of old-fashioned flowers of the gaudiest colours. The house is strongly built with oak logs, neatly joined at the corners; the roof is steep, and thatched with straw—the thatcher having been an adept at his trade, for the work is faultless. Under the eaves the ends of the oak beams, supporting an upper floor and the roof as well, project with a neat cornice finish. These beams are made strong and frequent, as the floor above bears the weight of grain reserved for home use. An instance occurred only last year of a floor giving way when the family were in bed, and the wheat came down and choked two of the inmates. The whole building is, perhaps, 70 feet in length, by 20 to 25 feet in width. Now for the inside. Entering by a door in the side, some 20 feet from the gable-end next the street, we are admitted into a small porch, from which folding-doors usher us into the hall. To the left is a door opening into the principal room or parlour, which looks out, generally with two small windows, into the street; and on the opposite side of the hall, which is about five feet wide and rather low in the ceiling, another door leads into the dining-room. Entering this room we notice there is only part of a partition between it and another—both together occupying the whole width of the house. This other is the workshop; for every Mennonite is a carpenter by trade, and has his bench and tools—the quaint furniture of every room, as well as the house itself, evidence his skill. Another door on the right leads from the dining-room plump into the stable, where both horses and cows are kept. Passing through the stable, still to the right, we enter the barn or shed, where part of the harvest, along with some of the farm machinery, and perhaps a light waggon, are stored. Our Mennonite has all the best agricultural implements in the market—steam-thrashers, self-binding reapers, mowing machines, and sulky ploughs. This end of the building is only enclosed with boards; but the frame work is substantial, and the roof uniform with the rest of it. Returning to the hall, and proceeding through it, we come upon the heating and ventilating arrangements of the establishment. These occupy pretty nearly the centre of the human part of the habitation. To the right, in a recess of the hall, is the door of a curious sort of furnace, built of sun-dried brick, and extending inwards several feet—thus forming part of the partition wall between the first-mentioned family room or parlour and an adjoining room, used for general purposes; one of which is evidently that of a dormitory, for we notice that some of the furniture serves the double purpose of a bed by night, and a lounge or chest of drawers by day. Standing in the hall, in front of the furnace, the head of the visitor is within what proves to be the commencement of the chimney. Looking skyward, we can see all the way up through a square mud-

walled enclosure, narrowing as it ascends, until it emerges from the ridge of the roof. The smoke from the furnaces passes into this chimney through a sheet iron pipe, called a stove-pipe in Canada. Opposite the recess on which stands the furnace, and immediately under the commencement of the chimney—which is here as wide as this part of the hall itself—there is a large cast-iron boiler, with a heating-box or stove under it. A few lengths of stove-pipe attached carry the smoke up the tall chimney, into which also rises the steam from the boiler, where cow-broth and other stable dainties are cooked. Coming in from the sweet, fresh air of the prairie, it must be confessed that the prevailing odours of the establishment are far from agreeable. They arise chiefly from the stables and from the fuel used in the furnace, which, in the very coldest weather, consists of stable-manure mixed with straw, formed into cakes, and dried in the sun. In milder weather straw alone is used. For cooking purposes an ordinary Canadian stove is used, for which sufficient wood as fuel is either purchased or hauled from some distant part of the country; for the Mennonites on the west of the Red River have none of their own to speak of, and I have not observed any sign of their beginning to grow any. They seem to have solved the problem of living on the prairie without wood. Only a very few of them have as yet tried the hay-stove, now of such common use in the Western Prairie States of America, and found to be of so much benefit. The land they now occupy, on account of the scarcity of wood, was passed by as worthless by Canadian and other settlers only a few years ago; but now it is, perhaps, the most coveted portion of the whole Province of Manitoba; and loud murmurs are sometimes heard of the injustice done to native Canadians, and other English-speaking settlers, by excluding them from the unoccupied lands of this flourishing and beautiful Mennonite reserve, which consists of about 17 townships—all of the finest prairie. The Gateway towns grumble because the Mennonites are such miserably small consumers of store goods. They make their own shoes, their own hats, their own clothes, and their own furniture, and they buy the fewest luxuries and the barest staples of any people in the country. No doubt, if those seventeen townships were owned and cultivated by Canadians or Americans, business would be livelier at the Corners; but, after all, the foreigners, if slow, are sure, and they are not unprogressive. This is their second move. Upwards of a century ago they left Prussia and settled in the Southern parts of Russia. Now they have left Russia and come to Manitoba. The Government must keep faith with these people; and we may be sure that their children—who learn English readily, and who are curious about and emulous of the strangers they meet so frequently on the road and in the market—will make as good settlers as any we shall ever get. They have done so in other parts of the American North-West. They profess a religion of the Quaker or Moravian type, and refuse to fight. This was how they emigrated, first from their native country, to escape service in the army of the great Frederick, next to escape the Russian conscription. Eager to make money—of which

they were not over-plentiful when they came to Manitoba—they welcome travellers to stop at their houses, and do their best as hosts and hostesses to provide entertainment. They have no great variety, but one can always get bread, coffee, milk, and eggs—of which latter I have known them to boil half a bushel for a party of seven; but this party had no faith in anything but eggs, and even that was shaken after the meal by a malicious wretch, who idly repeated a current but wholly untrue and libellous tale about the poor hens.

There is another Mennonite reservation on Rat River, on the east side of Red River, embracing 175,000 acres; but, owing to a succession of abnormally wet seasons, it has not been doing so well as the one on the west side of the river. A great many of the Rat River Mennonites crossed over to the other reserve last year, and took up land in the unoccupied portions. Shipping all their heavy stuff, which included the logs, beams, rafters, and flooring of their houses, by rail from Otterburn or Niverville on the Pembina branch to Emerson, they were employed all last summer in hauling their stuff away and rebuilding their houses. It was a rough kind of experience for them, poor people! and will keep them back for some time to come; but it is to be hoped they will do better in the western reserve. On the 18th of August, 1877, Lord Dufferin—our then Governor-General—making his celebrated tour of the North-West, visited the Mennonite settlements on the east side of the Red River; and at that time they were doing well, as we learn from an address presented by them to His Excellency on the occasion, from which we quote as follows:—

“We are pleased to be able to state that we are satisfied in the highest degree with the country and the soil, and also the manner in which the Government have kept their promises to us. Your Excellency has now the opportunity of seeing for yourself what we have accomplished during our short residence. You see our villages, our fields, and our bountiful harvests—witnesses in themselves that the capabilities of the country have not been misrepresented to us. Under the guidance and protection of Divine Providence, we have every reason to look forward confidently to great future prosperity, our villages multiplied, and our herds increased. We are contented and willing to obey the laws of the land, but we cannot reconcile our religious belief with the performance of military duty.”

The following is an abstract of a carefully prepared report of the progress of these peculiar people in the reserve west of the Red River, published in the *International* newspaper of Emerson last November:—

“The Mennonite Reserve west of Emerson comprises seventeen townships, commencing about six miles west of the town, and extending 40 miles westward. It contains a population of nearly four thousand people, divided among thirty-four villages, in some of which are small stores, while there are churches and school-houses, a steam grist mill, and a grist mill of which the motive power is a windmill. The first settlement was made in 1876. By reference to the files of *The International*, we find that the population of the Reserve in 1879 was 2841 souls, and that in that year the total amount of grain raised was a little over 200,000 bushels, while the value of their stock and implements was 140,000 dols.

"There were, during the year past, 167 marriages. There are under cultivation on the reserve 17,987 acres, which were cropped this season as follows:—Wheat, 10,656 acres; rye, 724 acres; barley, 1922 1/2 acres; oats, 2679 acres; flax seed, 1395 acres; millet, 128 acres.

"The average yield of wheat in many of the villages was over twenty bushels to the acre, but the general average of the reserve was greatly pulled down by severe injury to, and in some cases destruction of, crops in one or two villages by hailstorms. Following is a table showing the resources and wealth of the reserve:—

POPULATION.

Number of families, 658, divided as follows:—

Males,.....	2,051
Females,.....	1,778
Visitors and hired help,.....	92

Total population,..... 3,921

AMOUNT OF GRAIN RAISED.

	Bushels.	Value in dols.
Wheat,.....	135,869, at 70c. per bushel,	95,108.38
Rye,.....	811, at 50c. " "	405.90
Barley,.....	48,019, at 40c. " "	19,207.60
Oats,.....	71,670, at 30c. " "	31,501.00
Flax,.....	14,837, at 96c. " "	14,193.52
Millet Seed,.....	915, at 50c. " "	457.50
Potatoes,.....	20,920, at 50c. " "	10,460.00

Total,.... 293,041 Total value, 161,332.42

NUMBER AND VALUE OF STOCK.

	No.	Value in dols.
Horses,.....	10,077, at 100 dols. each,	107,700.00
Colts,.....	155, at 30 " "	4,650.00
Oxen,.....	843, at 50 " "	42,150.00
Bulls,.....	76, at 20 " "	1,520.00
Cows,.....	1,047, at 30 " "	31,410.00
Young stock,.....	1,353, at 15 " "	20,291.00
Sheep,.....	97, at 6 " "	582.00
Hogs,.....	2,622, at 5 " "	13,110.00

Total value of stock,..... 221,417.00

NUMBER AND VALUE OF IMPLEMENTS.

	No.	Value in dols.
Waggons,.....	671, at 80 dols. each,	53,680
Ploughs,.....	661, at 25 " "	16,525
Harrows,.....	664, at 15 " "	9,969
Hay Rakes,.....	101, at 40 " "	4,440
Mowers,.....	215, at 100 " "	21,500
Reapers,.....	213, at 150 " "	31,950
Horse-power Threshers,...	7, at 600 " "	4,200
Steam Threshers,.....	15, at 1400 " "	21,000

Total value,..... 162,000

Travelling westward through or in sight of the Mennonite villages, the uncouth German names of which I shall not pretend to give, the prospect of the south continues to be bounded by the belt of heavy oak woods lining the Pembina River, which all the way through this lower part of its course eastward to join the Red River

at the American town called after its name, runs through the Territory of Dakota. We shall cross it in Manitoba, 60 miles or so further on. In front, rising more distinctly out of the level plain as we advance, and resembling a low black cloud bounding the horizon to the west, looms up the Pembina Mountain, forming the western "bank" of the Red River valley. It is still a good way ahead, but as we are making good time we at length catch sight of "Mountain City" nestling on the slope. The art of making towns on paper, an art which has been carried to a high degree of perfection in the United States of America, has been introduced and somewhat extensively practised in the Canadian north-west. The reader might possibly be entertained with the history of some of our town-sites; but life is too short for the purpose. They show a picture of what Chicago was in 1833—an Indian teepee, a log house, and a little muddy river, and that picture dwells in the imagination of every person that owns a river crossing, a lot with a railway station, or a wonderful well on it; and his property, to hear him talk, is going to be the future hub of the north-west creation. "Mountain City," which boasts of about a score and a half of houses, including a church or two, several stores and taverns, is a convenient stopping place as the road now goes, but what it will be when a railway runs west is not for us to say. It occupies a fine breezy wholesome situation overlooking the vast plain we have just crossed: Nelsonville, a few miles distant, lying at the foot of the slope in the north-west of township 3, range 6 west, is a somewhat larger town, having a Dominion Land Office in charge of a genial agent of the name of Landerkin; an excellent grist and saw mill, which rents for 300 dollars a year—the tenant, a smart Yankee, making money at that; several very good stores, and quite a number of other buildings, with others projected or in course of erection. It is quite a smart little place, rather wet at times from the soakage of the ridge, but this defect, it is said, can easily be overcome by proper drainage.

The road from Nelsonville to the Little Pembina River, below "Calf Mountain," winds first through the slopes of the ridge and is stony in places. We also pass some deep gullies once heavily timbered, but now getting pretty thin. Once fairly on the plateau or second plain, the land is beautifully undulating, and we pass some fine farms and wooded belts. The soil is not so deep nor of the same character as in the alluvial plain below, but it is still very rich, producing the best of wheat, barley, oats, and peas; very few of the "mountain" farmers would care to exchange into the valley, if they had the chance. The land has much better natural drainage, and though the winters must be colder on account of the greater altitude, the spring, strange to say, is at least 10 days earlier, and the harvest the same. At the south-west corner of township 3, range 7 west, the trail passes the north side of a curious isolated round eminence, rejoicing in the name of Calf Mountain, which is the most conspicuous land-mark in the country for many

miles around. Everybody stops here, runs to the top, which is probably 50 feet above the surrounding plain, and takes a good look about him. The prospect is various, embracing bluffs of timber, patches of forbidding scrub, pond holes, part of the valley of the Little Pembina, some of it hollow and wet; but nowhere does the eye take in a far-reaching plain like what presents itself to the beholder looking eastward from Mountain City. Calf Mountain is simply a mass of unmodified drift, which, perhaps from its peculiar gravelly-clay consistency, has better withstood the washing down process, than other drift accumulations long since levelled. The prospect is perhaps changed since I saw it last spring; then it was beginning to strike people that it was a good point for a town, and a town forthwith began to grow. It commenced first by somebody erecting a stopping place for travellers near the crossing of the Little Pembina, a few hundred yards from the foot of the mountain: now "Calf Mountain" is the name of a post-office, and I suppose there is a village by this time with the usual number of stores and taverns, and the usual bright prospects of future fame and development. It is wonderful how quickly everything grows and changes in the North-West. Professor Macoun, than whom no one knows the country better, had to confess in a lecture he delivered at Winnipeg last October, that since he had been away on his exploring tour during the summer, five new cities had started, and for the life of him he could not tell where they were. Returning to the North-West, after an absence of two or three years, one would be a sort of Rip Van Winkle; and this is also and perhaps more emphatically true in regard to the country to the south of the Line. Individualism and perfect freedom are working out strange problems in the West.

At Calf Mountain, or rather after the crossing of the Little Pembina, which is now done by means of a substantial wooden bridge (when I was there I had to ford it), we have the choice of two trails to the west—one north-west, through townships 3, 4, and 5, ranges 8, 9, and 10—to the Swan Lake Settlement. Township 5 appears on the general map as covered with wood, which it may have been at one time, but only the two northern and the two eastern tiers of sections can be said to be wooded. This township has a gradual slope to the south, and another from the south to the north, the two meeting in a ravine running irregularly east and west through the second and third tiers of sections. Swan Lake, which gives its name to the settlement, is a beautiful sheet of water, occupying part of the south-west corner of township 5, range 11. It is well stocked with fish, and game is abundant—deer, elk, and moose—notwithstanding the indiscriminate slaughter practised by a small band of worthless Indians, supposed to be living on their reserve on the lake shore, but who are never there except in the winter, when they are said to be a complete nuisance to the settlers. Too lazy to provide for the winter, they prefer to beg, and, in spite of every remonstrance, continue to hunt when the does are in calf,

and take them in preference to the bucks, because it is easier work. The Swan Lake Settlement, which extends down into township 4 as far as the Pembina River, has a superior class of settlers; all seem to be pleased with their locations, and speak highly of the country. Wood for fuel and building purposes is plenty, the soil both of the scrub land and the prairie is of excellent quality, and the crops so far abundant and certain. All that is wanted to give perfect satisfaction and contentment to the settlers is a railway, and they are going to have it very soon. Some ten or twelve miles west of Swan Lake Settlement—after traversing the probable route of this much-wanted South-Western Railway, through long stretches of poplar woods and bushy prairie, where the soil is very good excepting on the hills, which are either of a slaty nature or covered with blown sand—we reach the western boundary of the Province of Manitoba, and, in township 5, range 13, enter the North-West Territory. This township would afford many fine locations for a large settlement; the northern portion of it is occupied by the Tiger Hills, which are covered with scrub, oak, poplar, and brush. Alkaline lakes are of frequent occurrence, but there are many fine springs without any mineral taste. The southern part of the township is alternate bush and prairie. An open prairie stretches to the west and south as far as the alkaline lakes in the next township. These lakes occur in a natural basin. They are mostly timbered round the edges, and look very pretty. Between them and the eastern half of Rock Lake is an extensive tract of dense scrub and timbered hills, through which travelling is next to impossible, and to reach the lake it is necessary to pass to the south-west, skirting the scrub. The north shore of Rock Lake is in some places very beautiful; the banks are sometimes 200 feet high and almost perpendicular, with numerous springs issuing from the sides; the banks are lined with a belt of heavy oak, poplar, and ash. Proceeding from the lake some five miles in a north-west direction, then to the south-west, we cross a river running into the lake near two other small lakes, called by the favourite names Lorne and Louise. It is now a wild, rambling journey to Turtle Mountain, some 25 miles south and west, over much the same kind of land as what we have traversed, but with more frequent stretches of prairie opening and extending away to the south.

Making towards Turtle Mountain along the south trail, branching off, as already observed, from Calf Mountain, or rather from the crossing of the Little Pembina River, we proceed due west through the north end of township 2, range 8, which contains a great deal of scrubby oak and willow bush towards the east, the western part being rough prairie, with numerous small round pond holes, swarming with duck in the spring and fall. In range 9 we cross the Pembina River, running south-east into Dakota; the banks are high and generally wooded, but are sometimes not high enough after heavy rains in the early part of the summer, as was the case last year and the year before, when there was a pretty considerable flood, the crossing of which was an adventure attended with some risk and a very great

deal of inconvenience. At the crossing of the trail there is now a substantial bridge and the usual promise of a town. On gaining the high level prairie on the right bank, after a pretty hard pull up its steep sides, and looking east, a fair scene is presented to view—a long winding valley and timbered hills far and near, with remarkable streaks of light and shade between. . Twenty-five miles in a straight line west, first through a level then a rolling prairie, brings us to Cypress River or Clearwater Creek, in the heart of the Paisley colony of four townships, in which, by arrangement with the Government, there are no reserves except for schools and the Hudson's Bay Company, who, by the conditions of the transfer, possess two sections, always the 8th and 26th in every township. The Paisley colony occupy a block of nearly 150 square miles of land that is unsurpassed in quality. It is thickly settled, each settler last spring having on an average 25 acres broken and ready for crop. The only land that could be bought here would be Hudson's Bay sections and a few quarter sections, the pre-emptions of some needy settlers, who might be tempted with an offer of not less than four dollars an acre. The nucleus of a village has already been formed at the crossing of the Cypress, with, no doubt, a brilliant future in store for it.

We have "one more river" to cross—not at any time a swelling Jordan, still less in the early spring, when all the streams are low. It is the Badger—a poor, insignificant affair, with no town as yet *in esse*, but no doubt one *in posse* at the crossing of the trail, which has still to be accomplished without the convenience of a bridge. All the way between the Cypress and the Badger—some 15 miles in a due western line—is over the same ever-rolling prairie; and so on for other 25 miles, to the old depot of the Boundary Commission and Mr. Lari-viere's farm and store, at the eastern end of Turtle Mountain, 125 miles due west from Emerson. In the Turtle Mountain region, north of the Boundary Line (for it extends far into Dakota), there are at least 100,000 acres of good timber for building purposes and fuel. Lignite coal of a very good quality has been found in the same formation to the south; the water is everywhere good and plentiful, and the soil—both on the mountain and surrounding prairie—is well adapted for agriculture. If we extend our trip for other 200 miles in a straight line, to the coal-fields of the Souris, the country would just be the same as what we have passed through; and if we took in the whole vast area included by such a line on the south, and by the Qu'Appelle and the Assiniboine on the north, the special features it would reveal would hardly be worth recording. It is not by any means a uniform flower-pot, filled with garden mould; but it is perhaps as near the possibility of being turned into that condition, by human skill and labour, as any other portion of the Canadian North-West. This area contains as much land as all broad Scotland, and there is room and free homesteads in it for thousands of Scotia's sons. In a year or two, at most, the South-Western Railway will pass through it. Another railway, connecting with the Canada Pacific 100 miles west of Winnipeg, will open up to settlement and civilisa-

tion the valley of the Qu'Appelle, and the Bow River country to the foot hills of the Rocky Mountains. This extension of railway communication, vast as it may seem to be, along with the country it opens up, is nothing, however, to an enterprise like the Great Pacific Railway, which will open up the half of a continent, and provide free homes for millions of the human race.

From Turtle Mountain to the Rapids of the Assiniboine, in a line due north, is a long stretch of 50 miles through a wild, unbroken wilderness of prairie, hill and hollow, woodland, marsh, and lake, till we cross the Souris River, eight or ten miles from its confluence with the Assiniboine. A few miles to the north-west of this crossing we reach the "Blue Hills of Brandon"—so called from Brandon House, an old post of the Hudson's Bay Company, the ruins of which are still to be seen near the banks of the river. Long ago this was a favourite meeting-place of the Indians; and the beautiful plains around and between the Souris and Assiniboine, now happily named Grand Valley, were the scene of many a fierce encounter. But the savage, with his tomahawk and scalping-knife, has followed the buffalo towards the setting-sun, and this beautiful valley is now being rapidly settled by the white man. In the month of May, 1879, there was not a settler in all this region; now there are more than a hundred. A Dominion Land Office, in charge of Mr. Newcomb, the late popular agent at Emerson, has been established at Milford, already a post-office and a possible town, situated at the mouth of the Souris. Brandon and Grand Valley, other post-offices and incipient towns, are also in this locality. In October, 1880, a party of Engineers were camped at Grand Valley, making surveys for a crossing over the Assiniboine in the interest of the Souris and Rocky Mountain Railway. A private letter from one of them reads as follows:—

"Grand Valley, Oct. 14th, 1880.

"DEAR SIR,—I send you a line to say we have returned thus far on our return trip. The country we have explored is wonderful. No person, unless travelling through it, could realise the splendid country it is for agricultural purposes. It only requires railroads to bring in thousands of inhabitants, as there would be no difficulty in raising any quantity of grain with very little trouble, as the land is of the finest quality. The North-West territory is far superior to Manitoba, the soil being lighter and easier worked, although quite as rich. The land is also much drier, being drained by nature, which is not the case with a large portion of Manitoba. Wood for fuel and building purposes is scarce in some parts; but the railroads would provide those portions with both coal and wood, &c."

But our best scientific authority with regard to the agricultural capabilities, resources, and climatology of this region, and the one who has explored in person the widest area of it, as well as of other portions of the "Great Lone Land," is Professor John Macoun, of Albert College, Belleville, Ontario. The Professor spent four months of last year in examining the country west of Grand Valley and south of the 51st parallel. Having during the four previous years explored

the Peace River country, the country north of the North Saskatchewan, the country along the main route of the Pacific as far west as Edmonton, and in 1879 the country to the north of the 51st parallel, he was sent in the early part of the summer of 1880 to explore the country to the south of this line, which was generally regarded as unfit for settlement. As the Professor stated, in a lecture to the Historical Society of Winnipeg after his return last October:—"The intention was to see whether this country was good, bad, or indifferent, and to know for a certainty whether it could be counted upon as of any value for the future." I may state here that while, in the popular estimation, this part of the country was considered of no account for farming purposes, and was never included in the so-called "fertile belt," but was regarded as constituting the apex to the north of the Great American Desert, yet there were a few men who evinced their faith in its capabilities for settlement by forming themselves into a company and procuring a charter, for the purpose of building a railway to run through it. Some of these men had seen part of the country themselves, and had heard a good deal about it from hunters and half-breeds—all resulting in the conviction that it was one of the most favoured portions of the Great Lone Land, and that a railway was all that was required to open up and develop its resources. In view of the opening up of this country by the Souris and Rocky Mountain Railway or some other, and of the efforts that will be made to induce settlers to occupy the free lands along its track, it will be worth while to give the substance of Professor Macoun's lecture, in which he reviews the result of his most recent explorations.

We copy from the *Winnipeg Free Press*:—

"On reaching Grand Valley he was to go west and examine Moose Mountain, then further westwards, and, including a little to the north, across the great plain of the Souris. He had stated last year that there was good land along the United States boundary as far as the 103rd meridian. This year he had penetrated to the 106th meridian, and had discovered the good land to extend 150 miles further west than he knew last year. But on this great plain there was not a bush for 100 miles. (A Voice—There's coal.) Yes, by actual demonstration he had proved that there was at least one seam of coal seven feet thick, besides three others of whose value he was not at present prepared to speak. The region, though capable of producing enormous crops, was not yet fit for settlement. The soil was thin friable clay, and the ground was very rough. There was great difficulty in procuring water, of which the lecturer gave examples from his own experience. That great plain was as level as a floor, so far as undulation was concerned, but was all broken into lumps from five or six inches up to a foot in height. Some observers had described the land as full of sun-cracks, but the gentlemen had written without knowledge. The openings were frost-cracks and not sun-cracks. The land was largely clay, but it was a friable clay. The rains that fell were absorbed into the soil, and the winters, being as here pretty frosty, the water was swollen by the frost, so that it heaved up the clay. The grass grew to the height of one and a half feet, and there were snowberry bushes and innumerable rose bushes which scented the whole air, although there was not a drop of water on the surface, the rain as it fell having descended into the cracks referred to. The plain was literally without water, yet any quantity could be found by digging a short distance below the surface, and the soil was always moist enough to support vegetation, and was an excellent one for growing wheat. Almost the whole plain west

of the Pembina Mountains as far as the great Saskatchewan would be found well suited for the raising of wheat. The lecturer then described the Coteau, which is beyond the great Souris plain. He said it is a strip of country twenty-five miles in width, consisting of a series of what Dr. George Dawson called tumultuous hills, thrown together without any order. Between the hills were little depressions filled with excellent water. The grass found in the fall and summer was excellent—there was no better pasture land anywhere. Having crossed the Coteau they crossed the third prairie steppe, or the lignite tertiary plateau of George Dawson. Professor Macoun found the soil good, as Mr. Dawson had also pronounced it, though the latter had gone along the boundary line, while the former went one degree farther north. On the prairie beyond McKinnon's, the Professor saw the proof that twenty-five bushels of grain can be raised to the acre on the sod. On the second and third prairie steppes, farmers had nothing to do but plough and sow, and reap the same year. The soil was good and the rain was sufficient to raise first-class crops of grain without irrigation. The Cypress Hills, he had thought of as hills that might be called the Delectable Mountains. He described the ascent of these hills, of which, at the eastern end, the elevation was 500 feet above the general level of the country, while at the western end it was 1,500 feet, or nearly 4,000 feet above sea level. They were altogether without wood at the western end and in some of the coulees, and the same was true of water. Grain might be grown on a portion of the eastern end, but Cypress Hills as a whole were totally unfit for the perfect growth of any kind of grain. They were also unfit for winter pasture, because the grass kept green all summer, and when the frost came it was green, and when thus killed by the frost was unfit to fatten cattle. In the coulees in the hills there were fine springs of water. The lecturer described two of these, the sources of which were only about a hundred yards apart, each of which was over a yard wide and a foot deep. The streams issuing from this height of land flowed on one side to Hudson's Bay, and on the other side to the Gulf of Mexico. The country south of the Cypress Hills was poor, having very little land that was fit for agriculture, or for first-class pasture. Fort Walsh was situated on Battle Creek, 60 feet below the top of the plateau. It was beautifully located as regards picturesqueness and convenience for supply of good water and wood, but not as regards health, being enveloped in fog and mist. In the middle of August farmers were found cutting their oats for fodder, not expecting that the crop would ripen. Potatoes also, in the valley near Fort Walsh, would be a very precarious crop. On the 17th of August the wheat was not yet shot on the farm of Mr. English, on the Assiniboine Reserve. It was sheer nonsense to talk about raising grain there, as the land was 4,000 feet above the level of the sea, that is half the height of the Rocky Mountains. He then referred to the Mounted Police and their quarters, and expressed his belief that they were of more avail than soldiers would be in preserving peace and quietness. There was abundance of coal in this country, though he would not reveal its locality. Professor Macoun, in conclusion, referred to statements made by various gentlemen in regard to this country, and advanced facts in refutation thereof. He explained how good soil was found thinly covered with gravel, showing how the burning away of the organic surface soil had left this coating of gravel. He further pointed out how the prairie soil was much better adapted than that of the forest to the raising of cereals, and then resumed his seat amid loud applause."

Since his return to Ontario, Professor Macoun has made other statements about the country, of which the following is a summary from the *Toronto Globe* :—

"In his latest statement Mr. Macoun follows up the idea that the distinction between the 'fertile belt' and the 'projection of the American desert' is largely mythical. He regards the whole vast region as fertile, though some of it is at present covered with 'blown sand and infertile clays



of the cretaceous system,' while other parts stand in need of drainage in order to get rid of ponds and marshes. The 'blown sand' is a feature of the more southerly region recently explored, and the marshes are found in the region farther north, heretofore called the 'fertile belt.' Of this latter district not more than five per cent., according to Mr. Macoun, is unfit for agricultural purposes, and yet he emphatically re-asserts that it is every way inferior to the more southerly 'desert,' which he estimates roughly at 100 miles from north to south, and 200 from east to west. A large part of it is without wood, the want of which he attributes to a succession of forest fires that would long ago have cleared off every vestige of timber if the country had been level, just as the forests farther north would have been swept away but for the lakes, ponds, and marshes. What woods are left standing are always to the north and east of the lakes, showing that the devastating fires come from the south and west. In the southern prairie land the wood found between the United States boundary and a line drawn from the Touchwood to the Eagle Hills is always on the borders of coulees, in river valleys, and in spots where shelter is afforded by drifted sand. The coulee is a deep, narrow valley or ravine, extending into hills or running for a great distance across a level prairie. They are often from 100 to 250 feet deep, and are often not noticeable until the traveller comes to their edge. The width varies from 200 to 600 yards, and they are crossed by means of natural paths, which are the beds of defunct water-courses. The following is Mr. Macoun's view of the origin of these singular hollows:—"In my opinion they are the result of the breaking up of the glacial period. All Arctic explorers speak of the great torrents of water which in a period of thaw pour down the sides of the glaciers. My theory is, that when the north-western prairies were in distant ages covered by glaciers, the torrents of water which poured down their sides, fell into great cracks or crevices in the ice which had been caused by some powerful convulsion of nature, and rushing along these it gradually excavated for itself a channel in the soil beneath. The glacial period having closed and the glaciers disappeared, the old channels which the water had cut for itself remained. I have never heard this theory advanced by any one except myself, but I cannot help thinking that it is the most reasonable explanation that can be offered for the existence of coulees. I may add that many of the smaller rivers of the North-West have these coulees as their channels, the rivulets having found their way into them and continued to flow into them ever since."

"Speaking of the winter in the Qu' Appelle district, Mr. Macoun says:—"Throughout the whole prairie region explored by me the winter is severe, but the snowfall is generally light, seldom exceeding a foot in depth. The accounts which are circulated about the mildness of the climate of the North-West are only applicable to the south-west corner of the territory east of the Rocky Mountains, extending in every direction 100 miles from Fort McLeod. This is called the Chinook country. It derives its name from the south-west wind, or 'Chinooks,' which blow in from the Pacific, and which often raise the temperature sixty degrees in a few hours. I cannot give you the accurate temperature of the Qu' Appelle country, because there is no scientific apparatus there for testing it; but it is certainly warmer than the 'fertile belt' north of it. I know this from the fact that while there were severe frosts in the territory north of us during the latter part of August, the temperature with us in the Qu' Appelle country never fell below 31, and injured nothing. The people in the neighbourhood of Fort Ellice and Qu' Appelle—the former over 200 and the latter 350 miles west of Winnipeg—plough from two to three weeks earlier than in any part of Manitoba. We had any quantity of ripe, luscious strawberries near Fort Ellice on the 16th June, 1879; and early this last summer, although in Portage la Prairie—60 miles west of Winnipeg—not a rose was in bloom, yet three days later, when we were at a point farther west, I found the whole atmosphere scented with them. At Qu' Appelle, both this year and last year, they cut barley in the last week of July. Frost in this country was never known to do injury to anything during the summer."

"In answer to a question about the existence of fish in the lakes and rivers, he says they are to be found in abundance:—'Buffalo Pound Lake and the Fishing Lakes in the Qu' Appelle country (the River Qu' Appelle flows through them) literally teem with whitefish of excellent quality. Long Lake, which enters the Qu' Appelle Valley from the north, at a point midway between the lakes already mentioned, is full of whitefish and pike; and in the winter the Indians of the Touchwood Hills flock thither to catch and store the fish. They fish by means of nets, which they spread under the ice. Long Lake is quite a respectable body of water, being forty miles long and two wide. But there is not only excellent fishing to be found in the lakes of the Qu' Appelle country, but excellent shooting also. That district would be the sportsman's paradise. Immense numbers of waterfowl are found on all the lakes and ponds of the prairie region, both during the breeding season and later in the fall. I brought home with me the skins of no less than twenty-six distinct species of ducks, besides those of numerous plover, snipe, &c.'"

"In Mr. Macoun's opinion the tide of immigration into the North-West will advance westward from Emerson till it reaches Roche Percee at the base of the Coteau. The Coteau is the name given by the half-breeds to a confused series of hills extending from the South Saskatchewan to the United States boundary, forming the eastern side of the third prairie steppe. From the Coteau it will probably find its way north-westward over the Souris Plain. The northern line of settlements, which now extends 200 miles westward from Winnipeg to beyond Bird Tail Creek, will cross the Assiniboine, extend westward up both sides of the Qu' Appelle, and then spread to the Saskatchewan and round the western base of the Touchwood Hills. In view of the great natural capabilities of this vast region, it is to be hoped that the absurd land regulations will be promptly repealed, the obnoxious anti-squatter order cancelled, and the whole area thrown open to settlement on a common-sense plan."

Returning to the Assiniboine, and crossing by the rude rope ferry at Milford, we strike through the woods that line the north bank of the river, and proceed north-west to the Little Saskatchewan, making for Rapid City in township 14, range 19. The land at first is rough and in parts stony; but as we strike the south trail from Portage la Prairie it becomes more uniform, though still undulating, scrubby, and full of round pond-holes, very much like the country west of Pembina Mountain. The surface is drift, modified by the action of rain, atmospheric influences, and vegetation. The valley of the Little Saskatchewan is of far greater extent than one would be led to expect. Approaching it as we do from the east, an immense hollow basin opens to the westward, with the river in the centre, which, however, remains long unseen; and when at length it becomes visible in some of its numerous windings, one's first impression is that such a river should have had a smaller valley, or such a valley a smaller river, the two being altogether disproportionate, and the one unable to account for the other. Some portions of the valley, however, especially between Minnedosa and Rapid City, are not much over half a mile in width, and here there are great rounded hills on both sides, with immense canyons or gorges running up to the plains above, excavated, no doubt, by the action of water. Ascending one of these near the new town of Odanah, we find the road toilsome and steep, and after reaching the level on top, feel certain that we have gained an altitude of at least 500 feet above the plain

below. At other points of the valley between Rapid City and the fourth base line there are no hills to speak of, but a long easy grade up on both sides. Numerous surveys of the valley have been made for the purpose of finding a suitable crossing for the Canada Pacific Railway. Lines have been run across the narrow and hilly portions between Minnedosa (formerly Tanner's Crossing) and Rapid City, as well as across the broad and more level parts between the latter place and the fourth base line. To an unprofessional eye the wide reaches without hills or gorges, and apparently easy grades down and up, would be the place to cross; and there is a stretch of the river about four miles in length below Balkwell's Mill, a little south of Rapid City, where four different lines had been run, and standing in line of the stakes we concluded there was not much to choose between them, and that no better crossings could be found. It is now claimed that the line is to cross at Odanah, in a narrow, hilly portion of the valley; but it is also claimed that it will cross at Minnedosa, a couple of miles to the north, and again at Rapid City, 12 or 15 miles to the south, all being in narrow and hilly portions of the valley. The town builders of the Little Saskatchewan have all been at their wits' end this last year or so; a more tantalising question than where the railway is to cross the river they have never had to consider; but the Syndicate, who are now to build the line, will determine the crossings to suit themselves, no matter whose mouths may be watering. Wherever the railway does cross, if between Minnedosa and the fourth base line, a town of some sort will undoubtedly spring up; if it should be at a point where there is a good fall of water, and there are several such points within the stretch just indicated, the town may grow to some importance. The valley of the Little Saskatchewan lying across the highway of western travel is the first great natural basin west of Winnipeg, with a river in it having a never-failing water-power. It is true the river is not more than 65 feet wide and 4 or 5 feet deep at best, but it can be relied on summer and winter; and where some of the best falls occur, that is, between Balkwell's Mill and the fourth base line, a stretch of six or seven miles, is where the power can be applied with the least expense. But, after all, it is for the Syndicate to say whether it will be for their interest or not to cross the Little Saskatchewan in any part of its course. They can go wherever they please, and it may suit them to take a route north of the river altogether, or they may cross the Assiniboine at Grand Valley and take the southern route through the country, redeemed from reproach by the recent explorations of Professor Macoun, an account of which we have just given.

Leaving the fourth base line where it intersects the river, we turn due north-west across the prairie, gently undulating and ascending, till we strike the trail from Rapid City to Shoal Lake, making for this our furthest western point in the present trip. A stranger's first impression in passing through this as well as many other parts of the *drift* country, is its dreary and apparently treeless

nakedness. One is apt to conclude that if he owned all the land as far as he could see on either side, it would hardly furnish him with a winter's fuel. This is a mistake so far as regards the country we are in. If we ask a settler where he expects to get wood for fuel, he will probably answer—"Well, there aint much around here, I have to go a good ways; there's always wood for the hauling if you go far enough." Perhaps in the next township it is quite plentiful. In the *drift* country the traveller thinks he is continually in a hollow, and that if he goes a little further on he will get out of it; but he never or hardly ever does, and, consequently, seldom gets a good view of the country round. All the way from Rapid City to Shoal Lake he sees nothing but an undulating prairie, occasional patches of scrub, and a constant succession of pond-holes.

Shoal Lake, on the west side of township 16, range 23 west, is another of those natural points in the country where a town may be expected to grow, especially if a railway passes through it. The lake is a long narrow sheet of clear blue water, slightly alkaline, but not unwholesome or unpleasant. It is only, perhaps, when the water is low in the early spring and fall that the brackish taste is very perceptible. In winter, when the water is at its lowest, the ice having left very little of it, that little will blacken a bright steel axe if left in it a day or so; but the ice is pure. There are three distinct sheets of water, except after very heavy summer rains, when there may be only one—two at most. The most northern portion, or Shoal Lake proper, is about five miles long by one broad, and is separated from what is called Cook's Lake—a much smaller sheet of water—by a narrow neck of land, having an opening or narrow channel at the outlet of the larger into the smaller lake. Across this channel there is a foot stick; but the water to the right, that forms a little bay gradually narrowing into the channel, is not too deep to ford at most seasons. The bottom is hard white sand and gravel, and it is a delightful wade across for weary travelled man or beast; the man with mocassins on, who has not had them wet for the last 16 miles, prefers the wade to the foot stick in warm weather. Hence the western trail for nearly a century has converged to this point. Cook's Lake to the south is more like a large marsh in the dry season. It also has an outlet which may be called a river, nearly a mile in length, with low marshy banks and reedy grass growing from the water. It empties itself into Raven Lake, the third and last of the series—larger than the second, but not so large as the first, or Shoal Lake proper. A company of speculators in the city of Toronto have recently purchased the land lying along part of the east shore of Cook's Lake and the river running from it as a town site. The town is surveyed, laid down on a very neat plan, and called "Shoal Lake." The intention is to build a bridge across the river, make the approaches on both banks firm and dry, and then divert the trail to this crossing, and through the town. It will be a more direct course, and in time will be preferred to the ford at the Narrows, already

described. The company have an agent on the spot, attending to the improvements and the sale of town lots. If the railway happens to take their route, their property will no doubt rise in value. The country north and south forms the valley of Oak River, of which the lakes just described may be considered as expansions. As in all river valleys in the North-West, there are here, both to the north and south of the lakes, some very pretty spots, and some fine land, which is being rapidly taken up and settled. But, if I am any judge, the finest town site about this part of the country is the hill which rises high and dry above the large lake, after crossing the foot stick or ford. As soon as the crossing is made, the ascent of the hill commences. On top it is, on a rough estimate, 75 feet above the lake, and commands a fine view of the surrounding country. The trail winds round the foot of it and another hill on the left, beyond which, about a half a mile, we pass on the right an important station of the North-West Mounted Police Force. We camp for the night on the high ground between the trail and the barracks, and in the morning introduce ourselves at the station, where we were glad to get a bag of oats for our horses. The officers and men are glad to meet strangers like ourselves on a visit to the country. We were asked the usual question if we brought any liquor with us; but as we had none, and did not look like a trading party, no search was made. One of the men owned the quarter section of land at the foot of the lake, which includes the neck of land, the ford, and the hill we admired so much. He asked 1000 dollars for it; and, although more than half of the lot was in the lake, we considered the price reasonable. After a long talk about the Indians, commenced on seeing two ugly specimens brought in as prisoners, charged with some petty offence, we took our departure, and spent the rest of the day exploring the country round, and trying to imagine what it would be like in ten years hence.

At this western limit of our round-about trip from Emerson we are nearly 100 miles north of the International Boundary Line, and about 180 miles north-west of the city of Winnipeg. Away to the north, some 250 miles or so, flows the Saskatchewan; and between us and that mighty river, not to speak of what lies beyond still further to the north, are the Riding Mountains, the Duck Mountains, the Porcupine and Basquia Hills, with many long fertile valleys intervening, as yet almost untrodden by the foot of the white man, but silently awaiting his arrival, and ready to reward his industry with their treasured stores of wealth. Still, it may be said, we are only at the threshold of this wonderful country, which stretches away before us to the west and the north-west a distance of from 600 to 900 miles. But for the vast uniformity of its alternating features—alluvial plains, undulating prairies, denuded drift heaps and sand *dunes*, bluffs of timber and scrub, marsh meadow and muskeg, mud-banked rivers and coulees, it would seem almost presumption to say that we had seen anything of the country at all.

After a final visit to the substantial and comfortable barracks of the mounted police, and a last look from the hill selected as the future town-site of this fair and fertile region, we turn our faces to the east, and enter upon the home stretch to Winnipeg. Retracing our steps for 16 miles, we come to the junction of several trails; the one to the south leads to Rapid City, and is that by which we came; the one to the north-east leads to the crossing of the Little Saskatchewan at Minnedosa, and is the one we take. Nothing new or strange in the aspect of the country arrests our attention, except it be indications of more frequent settlement, especially to the north, along the upper reaches of the river, which has here a more easterly course, skirting the plateau of the Riding Mountain, scarcely discerned as a mountain, however, till some time after we make the crossing at Minnedosa; then for a considerable distance our way leads over one of its eastern spurs down to the valley beneath, from which we look back on the wooded heights, as we looked forward to those of the Pembina Mountain in the earlier stages of our journey. We have come back once more to the alluvial soil of the Red River Valley, less uniform at this, its northern extremity, where it attains its greatest breadth, and is traversed in a south-easterly direction by a succession of long, narrow, gravelly ridges, with hollows intervening that are frequently wet and marshy. Along by Stony Creek, however, we pass through some very fine country until within 15 to 20 miles of the village of Gladstone, where for a considerable distance it is wet, and the roads are miserable. The Palestine Settlement, of which Gladstone is the principal town, is a fine stretch of level prairie; but for the last two or three years it has suffered from the heavy rains and the consequent overflow of the great marshes with which it is surrounded. Some of the settlers spoke rather discouragingly of their prospects; while others, more hopeful, referred to former dry seasons, when they had nothing to complain of, and these people were setting to work in the right way to cut ditch drains. Drainage is the great question of the country immediately west and south of Lake Manitoba, as far as Portage la Prairie. Several schemes have been proposed; one of them, and perhaps the most effectual—although its magnitude may delay its execution for some time yet—is to lower the level of the lake, which is some 60 feet above that of Lake Winnipeg. The two lakes communicate by the Fairford River, and it is said that the removal of certain obstructions in the bed of this stream would lower Lake Manitoba, and so drain the whole country to the west and south. The people, as well as their representatives in the local legislature, are fully alive to the importance of this question of drainage; and this last year has seen the commencement of a system which bids fair to remedy the most serious defect this rich country has to complain of. An arrangement has been made by which the province is allowed to draw upon the consolidated revenue to the extent of 50,000 dollars, which it is proposed to loan to the municipalities at a low rate of interest for drainage purposes. The Board of Works

of the province is to order the surveys, and to fix the estimates in the case of any of the municipalities applying for the execution of a system of drainage and a loan for the purpose of effecting it, which loan is to be repaid by a separate tax on the land benefited. Springfield, one of the municipalities east of Winnipeg, has just borrowed 50,000 dollars on its own credit for drainage purposes; and we may add that the debentures issued as the security for the loan, bearing seven per cent., were sold *at par*. With evidences like these of the determination of the people to master the difficulties incident to a country in a state of nature, we may expect to see great improvements within a very short time.

Half-way between Minnedosa and the Palestine Settlement, and lying to the north of the trail we came by, is Eden Settlement, embraced within townships 16, 17, and 18, and ranges 14 and 15. It is only three years last spring since land was first taken up in this quarter, and already there is a large and prosperous settlement, with plenty of room for further increase to the north as far as Dauphin Lake, and west as far as the Riding Mountain. The land is mixed prairie and brush, interspersed with meadows and marshes; the soil a deep black loam. The wild-hop grows here in profusion, and is equal to the best cultivated variety we ever saw. The small wild fruits, such as black currants, gooseberries, strawberries, cranberries, hazelnuts, filberts, and *poires de sauvage*, the *saskatum* of the Indians, all grow here in perfection. There is a good supply of timber, and it becomes more plentiful towards the north, ending in the dense forests of the Lake region. Settlers might do a great deal worse than try this part of the country.

From Palestine our way lies south-east to Westbourne along the White Mud River, which here takes a turn to the north and empties into Lake Manitoba. The next stage along the same route to the south-west is Portage la Prairie, near the Assiniboine,—the most important town in the country west of Winnipeg. As most visitors and tourists extend their observations of the country as far west as Portage la Prairie, making the trip by boat, stage, or hired conveyance, but now more speedily and comfortably by the railway, both the town and the country lying between it and the city of Winnipeg have been so frequently described that we shall at once pass on to our destination—the metropolis of the North-West.

From its being the only real centre of population in the immense territory about which the world has heard so much, and almost for the first time within the last decade, Winnipeg has attracted more attention during the last two years than any other city in the Dominion, and its future as the chief commercial centre of the Canadian North-West may be considered certain. No rival, or the remotest sign of one, has yet appeared. There is, indeed, no saying what this great country may bring forth; but before it develops another city of the present importance of its capital, Winnipeg will

be above all anxiety as to her future position in the North-West. In a very short time a net-work of railways will give this city the command of every avenue of north-western trade; already it has communication with the railway system of the United States by means of the Pembina Branch; in two or three years at most the C. P. R. will be completed to Thunder Bay, opening up the intervening mineral and timber regions; the South-Western Railway, extending to the coal-fields of the Souris; the Westbourne and North-Western Railway, extending to the Saskatchewan; and the Souris and Rocky Mountain Railway (if the Syndicate do not interfere) will bring other vast regions under tribute. The position of Winnipeg, at the confluence of the Assiniboine with the Red River, gives it the further advantage of competing routes by water, west as far as Fort Ellice, for a couple of months in the year; south to Fargo and Moorhead, in Dakota and Minnesota, five or six months in the year; and north to the head of Lake Winnipeg, if not for 1000 miles up the Saskatchewan.

Winnipeg is the head-quarters of the Provincial Government, and the residence of the Lieut.-Governor of the Province. All the public departments of the local Government are administered here, as also the business of the Superior Courts, and of the Ottawa Government in local matters pertaining to Customs, Inland Revenue, Immigration, Dominion Lands, Indians, the Pacific Railways, &c. In the year 1870 the mixed population of whites, Indians, and half-breeds, amounted to 253 all told; in 1873, when the city was incorporated, the numbers had increased to 2200; now, at the end of 1880, it has a population of at least 10,000, distributed over an area of about 2000 acres, or nearly three square miles. In 1880 upwards of 400 tenement houses and stores were erected. This does not include buildings just started and under way, as the Merchants' Bank, the Manitoba Club House, the Parliament Buildings, or the Lieut.-Governor's residence.

The following is a statement of the customs returns of the port of Winnipeg for the fiscal year ending 30th June, 1880, compared with the first recorded returns of the year 1872:—

	1872.	1880.
Imports—Canadian Goods, ...	225,000 dols.	3,599,980 dols.
„ Foreign „ ...	926,259 „	1,227,005 „
Exports,	125,000 „	562,714 „
Duties,	46,839 „	297,768 „

The total receipts from Inland Revenue were 67,572 dols., against 3797 dols. in 1872.

The carrying trade by rail and steamer, comprising general merchandise, agricultural implements and machinery, farm produce, furs, fuel, and lumber, is placed at 50,000 tons.

The service assessment of city property in the spring of 1880 stood at 4,600,000 dollars. The rate of taxation, inclusive of School Tax, was 15 mills. on the dollar; and the revenue from all sources was expected to reach 57,000 dollars, which, for the first time, will about meet the expenditure. Next year these figures will, no doubt, be

largely exceeded. The indebtedness of the city is given at about 400,000 dollars, as against assets and permanent improvements far in excess of that amount.

After receiving the waters of the Assiniboine, the Red River will average about 1000 feet in width. It is now spanned by a temporary trestle bridge, built for the convenience of the Pacific Railway; but the permanent railway and passenger bridge, now being erected at the expense of the city, will be completed and the temporary one removed before the opening of navigation in the spring of 1881.

Winnipeg and its surroundings have associations connected with the early settlement and recent transfer of the country that will always possess a special and peculiar interest. It is a lively city; and while its citizens, like all others in a new Western country, may be alive to the chances of making money, they are at the same time remarkable for their intelligence, hospitality, and good conduct. Sunday is about as well observed in Winnipeg as in any other town or city in the Dominion.

In the summer of 1879, I made a trip to the Saskatchewan by way of Lakes Manitoba and Winnipegosis. This route may interest the reader, as it will introduce him to a part of the North-West about which the guide-books have not yet learned to speak;—the guide-books, with a few exceptions, have been manufactured by people who never saw the country they pretend to describe.

We had an overland journey of 75 miles to make before reaching navigation, and it would take us five or six weeks to make the round trip; so the first consideration—as it always is in undertaking a journey in the North-West—was a proper outfit. Ours, which might have been better, will be seen from the mention of its details. First of all we hired a pony and Red River cart, along with their owner, "George," a stout young French half-breed, who had been all his life on the plains, and knew every trail between Winnipeg and the Rocky Mountains. In the next place we bought a small tent, costing six dollars; 2 buffalo robes to sleep on, costing nine dollars; and a pair of blankets. We had also our changes of under-clothing, and a supply of socks and moccasins. Our provisions consisted of a bag of pemmican, 2 bags of flour, 20 lbs. of black tea—some of which we expected to part with in trade for berries and other Indian wealth. We also took some tobacco for the same purpose; some bacon, a bag of hard tack, and a few bottles of pain-killer. Our cooking utensils consisted of a couple of frying pans (an extra one being necessary for cooking our bannocks, as we had no camp oven), several tin-pails—one for making tea, another for stewing ducks or boiling fish—tin-cups, tin-pails, knives, forks, spoons, and an axe to chop firewood. These stores made an easy load for our little Indian pony; and as two of our party were boys under 16 years of age, they, in turn, got a ride on top. With "George" as guide and driver, we made up five persons in all. Leaving Winnipeg an hour before dusk, we proceeded

along the Portage Road two miles due west, and then struck north-west across the prairie other two miles, where we halted for the night. It was now quite dark; and as we had omitted to bring tent-poles, and could not pitch the tent, we lay down on the buffalo robes, rolled ourselves in the blankets, and commenced to try to make out the constellations. What a grand display they made, with nothing to mar the view but the line of the distant horizon! If people once got into the habit of looking up in this country, they could not help being astronomers. George lay under his cart, and, of course, had not the same range of observation; the pony, with his hobble on, cropped the prairie grass, and perhaps never looked up. A steady warm gale from the Rocky Mountains blew over us the whole night, and in the morning our blankets were wet with dew; but we rose fresh and well in the grey dawn, cooked and ate our breakfast of tea, fried bacon, and hard tack; rolled up our bedding in the buffalo robes, and took our departure. Our course lay due north-west, angling through townships 11 and 12, ranges 2 east and 1 east; along a well-worn trail, which runs all the way to Lake Manitoba, in a line nearly parallel with the old surveyed route of the C. P. R., between Selkirk and the "Narrows." For a distance of 20 miles or so the trail runs through a level prairie, entirely destitute of timber, and with occasional hollows well filled with water, that sometimes took us to the knees. George, with his pony-cart, silently led the way, while we trudged on behind. The boys, with their shot-guns, popped away at the ducks and yellow-legs—a species of plover very plentiful near water, and very good eating. By noon, when a halt was made for rest and dinner, the bag was more than sufficient for a good stew. George displayed remarkable genius as a prairie cook, and in finding wood and water when the search appeared to us hopeless. The water, it is true, came from a "slough" (pronounced *slue*), and was of doubtful hue and consistency; but no matter what sort of fluid goes into the kettle, a boil and a handful of black tea is supposed to settle it.

On this our first day's journey we made 25 miles, and before sunset, having gained a high and dry ridge, with wood and water convenient, we camped for the night. This time we had poles cut, and duly pitched our tent; but I must say I prefer the "spacious firmament on high" as a canopy on the prairie when the weather is fine. Making another early start next morning, we pass over a somewhat rougher country than we had seen the day before, and towards the afternoon skirt along the south shore of Shoal Lake, in township 15, range 2 west—a large sheet of brackish water, at this time of the year swarming with pelican. This is a very common bird in the lakes of the north-west; it stands over two feet in height, and has a bill nearly a foot long, from which depends a hideous pouch or fish-bag, where the creature stores its food; it is an ugly biped, with an intolerably fishy fume; my *compagnon du voyage* had a tobacco-pouch made from one of the fish-bags, but it was the work of a squaw, who alone could handle the raw material.

Our moccassins were frequently wet on this second day's tramp, and one of the boys was nearly drowned in a muskeg, but as the sun was very hot, we were often glad to come to a wet spot, if it was not a downright alkali swamp, which is very offensive.

In camping for the night, after completing other 25 miles or so, we chose a high and dry spot near what is called Rat Lake, where, after supper, George and the boys gathered *saskatum* berries, a small fruit growing on bushes from three to six feet high, and much prized by the Indians; George told us how they mixed them with pemmican, and promised us a mess for breakfast next morning. Instead of pitching the tent this evening, we repeated the experiment of lying on the grass with the stars overhead; and I may say here that during the five or six weeks we were out on this trip, we never after this went under canvas, except for shelter from the rain.

Next day about noon we reached Oak Point, on Lake Manitoba—*Point des Chenes* of the French half-breeds, who have gathered here in considerable numbers, some of them well-to-do in the world. The Hudson's Bay Company have here an important post, established a great many years, the whole lake region being considered a choice preserve, especially for the supply of rat skins. The water rat still swarms in myriads on the low shores of the lakes, creeks, and bays; and the Indian bands scattered over the country as far as the Saskatchewan kill enormous quantities of them every year: Big Indian loves a rat; it gives him, in season, one good meal, and a dozen skins will buy him a week's tobacco at the Hudson Bay post. The skins are worth 11 cents in Winnipeg, and sometimes 20 cents in Toronto; of late years they have been in considerable demand, taking the place of more expensive furs for a great many purposes. *Point des Chenes*, as the name implies, is—or rather was—covered with a pretty extensive belt of wood, chiefly oak. There are still a few trees left, and the place is near the commencement of a great wooded tract, which extends over the entire upper lake region. Eight miles to the south, along the lake shore, there is a larger and older settlement than Oak Point, called St. Laurent, or the "Mission," which is a Roman Catholic establishment of some importance. The land in the vicinity of both settlements is the usual black loam, but it is not so deep as in the river bottoms, and there is some loose stone through it. There is very little farming done, except by the few English-speaking settlers who have taken up land in this quarter. The half-breed is generally content with a small garden-patch, weedy and ill-fenced, which his wife and numerous children attend to, while he himself hunts, fishes, or hires out as a freighter on the plains; sometimes he is employed to navigate the lakes with a party of tourists like ourselves. But there are some honourable exceptions to this rule—men who own considerable property, and are looked up to and respected.

We had now to part with our guide George, who had served us faithfully, and had done for us what a white man would never have thought of doing. On leaving the camp on the second morning of

our march we forgot to put the axe in the cart, and did not miss it till we had gone five or six miles. George, without saying a word, unhitched the pony and rode back for it. We made him happy with a ten dollar bill for his services, and a belt he took a fancy to, adding as much pemmican, flour, and tea as would serve his needs on the home-stretch. The reader may wonder what he would do with the flour without such means of utilising it as we with our "cook's friend" and frying pans possessed. George had to hurry back to Winnipeg with his empty cart to join a freighter's train *en route* to Edmonton, and had no time to make bannocks, but he had learned on the plains how to make dough-nuts and bake them on the end of a stick.

Arrangements had now to be made about a boat and a boat's crew. The Hon. Dr. Schultz, of Winnipeg, had kindly offered us the use of a boat belonging to him, which we found hauled up on the beach where it had lain all the previous winter and spring, and was now rather badly used up. We had brought with us some oakum and nails, expecting to have to do some little repairing, but it required more than we had the time or the means to give, and so we hired another from a half-breed who was to charge us only eight dollars for the round trip if we returned within a month or six weeks. The York boat, of which this one we hired was a somewhat dilapidated specimen, is the only craft on these waters, except it may be a steam tug for hauling saw-logs; it derives its name from the pattern invented at York Factory for the navigation of the rivers emptying into Hudson's Bay. Its dimensions are usually 35 feet keel, and 7 to 8 feet beam; it is pointed at the stern, carries a large square sail and six long heavy oars made of spruce pine. It is scarcely the right sort of craft for lake navigation, as sailing is next to impossible, except with a fair or nearly fair wind, and when that fails, there is nothing for it but to haul up in some convenient shelter and wait for a change.

We shipped a crew of two French half-breeds, old *voyageurs* of long service in the Hudson's Bay Company on every water stretch between Lake Winnipeg and the Mackenzie River. One of them had been with the party who went by the Mackenzie River route in search of Franklin, and in his broken English often tried to describe the expedition. He had often wintered on the Mackenzie River, and had a longing to go back. There were "good, ah! good Indian there, and black fox, silver fox, fine marten, ah! fine marten, make lots money; tak two boat and trade, come home rich, all black fox, silver fox, fine marten, ah! fine marten." Marcellais would have us come back next year with a cargo of prints, tea, tobacco, powder, and shot, to trade for skins with the good Indians on the Mackenzie River.

Our York boat lay at the mouth of a creek some twelve miles distant, so we passed the night at Oak Point, and started with an ox cart next morning. The road lay north along the lake shore which is here low and wet, and for the most part bare of timber, the real

forest on this side of the lake being still distant a few miles further to the north. To the west stretched, far beyond the line of the horizon, the white waters of Lake Manitoba. It is about 40 miles across at the foot, but gradually narrows towards the north, as we shall notice further on.

Arrived at the creek where our boat lay, after wading half-a-mile through tall reedy grass with water above the knees, we managed to get on board with our load. The ox and cart by previous arrangement being left in charge of a half-breed relation of the owner who lived close by, and was to take them back to Oak Point, we launched into the creek and pulled towards the lake, where we had the good fortune to meet a fair wind that lasted till night fall, and took us fully 20 miles on our voyage. At dark we hauled up on the lee shore of a small bay surrounded with thick woods. The wind calmed down, and the mosquitoes came down upon us in myriads; the two half-breeds made a smudge, and after supper, lay down in their blankets on the beach; the rest of us, provided with mosquito-nets, which we pulled over our hats, made ourselves as comfortable as we could on the stern-sheets and thwarts of the boat. We were weather-bound for two days at this place, but on the third got off again, and made the run to the "Narrows." Here, where the lake contracts to a mere channel, was to have been the crossing of the Pacific Railway under the Mackenzie administration, that came to grief at the general election in September, 1878. This old route, which was endorsed by the best engineers, would certainly have been the shortest cut to the Saskatchewan, and, at the same time, a good thing for the "Narrows," and the country west of Winnipegosis, which must now remain a *terra incognita*, unless something is done to put steamers on the lakes. On the other hand, the new route south of the lake satisfies the Manitobans, and serves a country already settled, and much in need of railway communication. At the Narrows we hauled up at Mr. William Sifton's, on the left bank. Mr. Sifton has charge of a section of the telegraph line which here crosses the lake at one stretch, and at a height of perhaps 80 feet; the pole on each bank being spliced, and standing out from the shore several yards, protected in a strong curb filled with stones. The country all around here is thickly wooded with good poplar, ash and oak. Sifton, and two or three white neighbours who settled here, expecting that the railway would do something for them in the way of building up a town, have cleared several acres around their log dwellings, and made gardens, which were in excellent trim. The roots and vegetables almost everywhere in the North-West are a standing marvel, but here they seemed to surpass anything we had ever seen before. The soil is a black vegetable loam, resting on white, round boulders and gravel. Mr. Sifton, in the discharge of his duties as superintendent of a section of the telegraph line, which extends to Battleford, had frequent opportunities of examining the country along the old railway survey, and he declared to us that he had never seen anything in the North-West equal to the valley of

the Swan River west of Winnipegosis. This testimony is fully corroborated by that of others who have visited the country.

Sailing from the Narrows, grateful to Mr. Sifton and his amiable wife for their kind hospitality during our short stay, we pass on the right the celebrated caves of the "Manitou," whence the lake derives its name "Manitoba," and where the "untutored mind" still venerates with awe the unseen Power, whose weird voice he hears when the waves beat among the rocks. Northward rises the "Bluff" with a wide expanse of lake intervening the most exposed and at times stogmy part of the waters north of the Narrows; but with a fair wind from the south we make to within sight of the mouth of the Water-Hen River the same evening. A little before dark a squall rose, and we hauled up on the lee of an island for shelter and a night's rest. Rain came on, but we managed to start a fire on the beach under the partial protection of the thick woods that came within a few feet of the water's edge. Supper of duck, pemmican, and the inevitable black tea despatched, we lay down in our buffalo robes and tried to sleep, but at midnight the half-breeds raised a shout that the wind had changed, and our boat was in danger from the boulders on which we had hauled up, so we had to tumble into the stern-sheets, and pole round a point of the island into shelter. It was pitch dark and the rain came down in torrents; our tent would have been a luxury on a night like this, but there was no room for it on shore among the woods and boulders, so we had to remain in the boat under what shelter the old square sail afforded. All next day as we sailed and rowed up the Water-Hen River, and the following night as we camped on the shore, the rain came pouring down; buffalo robes, blankets, every stitch of clothing we had on or could put on were soaking wet. But the next morning broke fine, and making way into Water-Hen Lake, and round the turn into the other branch of the Water-Hen River, we had time to have everything made dry; not one of us ever caught the least cold after our long drenching.

The Water-Hen River, as in the gloom of the wet misty morning we entered it, had a strange Indian look never to be forgotten. It would hardly have been a surprise to have seen an army of braves start from the willows and challenge our right to molest their ancient solitary reign. The banks of the river are almost uniformly low, with a varying belt of bright green and tall grass, extending from the water's edge to the dark thick line of woods in the background. Sometimes the woods come close to the river and then recede in a semicircle; giving place to the meadow grass, on which frequent clumps of willows and scattered poplar occur. There are many apparently tempting locations for settlement all along this south branch of the river, which is a beautiful clear stream, with a pebbly bottom in many parts, never flooding its banks like the prairie rivers, and stocked with the finest white fish. The land is heavily wooded, but the timber is seldom over a foot through at the butt, so that the clearing could be done with half the labour

of the Ontario settler. The only trouble seems to be the frequent occurrence of low wet spots. I am afraid there is not a sufficient quantity of high and dry land at the present water-level of the lakes to insure a large and continuous settlement along this branch of the Water-Hen. There are two branches of this river running in opposite directions and only some six miles apart, the country between generally wooded, but of no great value for agricultural purposes. That branch which flows south into Lake Manitoba receives its waters from Water-Hen Lake, which may be regarded as an expansion of the other branch flowing north into it from Lake Winnipegosis. South Water-Hen, therefore, is the outlet of Water-Hen Lake, and North Water-Hen the outlet of Lake Winnipegosis. Half-way up the south branch the current is a little swift for a few miles; this part of the river gets the name of the Rapids, which is rather misleading, as they are nothing more than a good current, and would not interfere with navigation by steamers of light draft. We might easily have pulled our boat through, but our half-breeds preferred "tracking," although that meant walking through wet grass up to the shoulders, and sometimes wading in the river up to the waist in order to cut off corners or keep the boat in the channel. With a heavy load tracking has always to be resorted to in this part of the river, but the *voyageurs* are used to it, and take to the water like true spaniels. White men would hardly put a rope round their shoulders and do this kind of work for others.

One day we were hauled up at the mouth of a creek, waiting for a wind. The boys were wandering round looking for ducks. All at once we heard a shot close by, and a shout from one of the half-breeds, who were both lying down behind some willow bushes, where breakfast had been cooked a little before. On running out to see what was the matter, I found that Marcellais had got several ducks shot in him;—one had got under the scalp on the top of his head, and another had entered his arm lengthways. The next thing I expected to see was the boy and his gun kicked into the creek; but Marcellais took it all as a capital joke. "Boy shoot man; boy have feather;" and he picked up a feather and stuck it in the boy's cap. Marcellais was always in good humour; and though his wounds must have been painful, he never complained nor showed the least ill-feeling to the boy.

The Water-Hen River is the only floating entrance into Winnipegosis. It adds 30 miles to the water-stretch, and is the worst part of the route for a sailing craft, especially a square-rigged York boat; for the wind from any southern point, favourable as far as the "turn," is dead a-head for the rest of the river passage by the north branch into Winnipegosis. It will always be the *bête noire* of lake navigation, except for pleasure excursions, and these are still far away in the future. Before entering the south branch of the Water-Hen, and some six miles to the west of the island, where we passed the night in the rain, the two lakes, Manitoba and Winnipegosis, approach to within a mile and three-quarters of each other. The barrier

between them is a low marshy neck of land, at the highest point not more than ten feet above the level of Winnipegosis, which is said to be as much as 18 feet above that of Lake Manitoba. A cutting through Meadow Portage, on this narrow neck or barrier between the lakes, will, no doubt, be made some day; but, unfortunately, the water is shallow for a good way out from the shore on both sides; so that, in addition to the canal, a long and wide channel leading up to it each way would require to be dredged out, and breakwaters erected for the protection of vessels entering the canal, as there is no natural harbour on either side. The entire basin of the two lakes is hollowed out of a dull, white limestone, somewhat shaley in texture, with the *débris* of which the shores are almost everywhere strewn; the very sand seems to be nothing but granulated limestone. There would be no fear of the canal or the passages leading to it being choked by mud or drift, as there is no sweeping current; but the bottom of the lakes, especially in the shallower parts, is crowded with boulders, among which are a certain proportion of the granite species, foreign to that part of the country, and evidently brought there by the glaciers. As the ice forms at the bottom of the shallow parts, these boulders are lifted in the spring and floated about. This is how we find them encircling the shores of almost all the islands, as well as some parts of the mainland; and they would, no doubt, seriously complicate the problem of joining the two lakes in the way I have mentioned.

At one point on the east shore of Manitoba, below the Narrows, where we camped for a short time, we observed, inland some 200 yards or so, a clearly defined beach, as if the water had but recently left it. It was at least 10 feet above the present level, and between it and the present beach was a low marsh full of tall, reedy grass. An old half-breed, who lived in a pretty good log-house standing a few yards above this outer beach, and who had been there for a great many years, told us that when he first settled in the country the water was up to where his house now stood, and he pointed out a tree to which he used to fasten his canoe. The question arose—What caused the shrinkage? My *compagnon de voyage*, who is a good observer, and had paid close attention to such natural phenomena during a residence of twenty years in the country around Hudson's Bay, was of the opinion that the whole lake region was undergoing a gradual elevation, participating in the elevation which, he was certain, had actually taken place within a comparatively recent period in the country lying to the north-east, in proof of which he mentioned some curious facts which had come under his observation, one of which was the finding of an old ship's anchor firmly jammed into the crevice of a rock on the very summit of a hill on the east coast of Hudson's Bay, near Little Whale River, fully 400 feet above the present sea level. A clumsy wooden stock, very much decayed, but still recognisable as oak, was found attached, and the iron, though a good deal corroded and scaled off, showed that it had been used on a large vessel, and must have once weighed a ton in

iron alone. But one would at first suppose that the tipping up of the end of a continent, for instance, would back the water flowing towards that end, and rather raise than lower the level in the upper courses. This would undoubtedly happen if the continent were a level plain, but would not be expected in the case of the land between the lakes and Hudson's Bay, where there is a downhill course, with frequent and abrupt rapids in the rivers flowing that way. To account for the shrinkage spoken of, therefore, we must suppose the elevation to have been local as affecting the lake region, and in a direction such as to empty the lakes, and, at the same time, not to interfere with the drainage into them from the south. It is difficult to imagine how this could be effected.

But to return to the Water Hen River, or rather to its expansion, Water-Hen Lake, where we make the bend to the south, after a long delay waiting for a wind to suit our complete change of course. At the "turn" we touch an Indian reserve, and are met by the whole band—men, women, and children—who turn out to see us. Some of the men board the boat and give us a hand at the oars, while the women hold up pails of berries, offering them for flour or tea. We passed another reserve at Dog Creek, below the Narrows; but the band were off on a bear hunt, and we saw none of them. These Indians are all, or nearly all, Swampy Crees, and are included in Treaty No. 2, numbering less than a thousand all told, scattered over several reservations. The agent in charge of them—that is, who pays them the treaty money, which is about all he does, resides several days' journey from several of the reservations, and not immediately in the neighbourhood of any. Each band has a certain option in choosing its locality, which is thence set apart for its use. It is earnestly contended by some that the only way to handle the North-West Indians is to keep them in scattered reservations; others as earnestly deprecate this system, holding that the Indians will never be anything but worthless vermin until they are placed in large numbers on large reservations, and forced to work and provide for themselves. Without altering the reservations, the Government last year appointed a number of instructors, which is probably a step in the right direction, if a proper selection has been made. Oxen and farm implements, such as ploughs, harrows, and waggons, have been furnished to some of the bands, and a beginning has been made in teaching them to farm. The Water Hen band got their implements six years ago, but the oxen had not arrived up to the time we were there!

The north branch of the Water-Hen River is much the same in appearance as the south branch; but no part of it, although the water was at its highest, showed any perceptible current. The land along both banks has the same low level, although there are some fine points that seem to invite settlement. Rather more than a mile from where the river opens out into the lake, or rather where the lake narrows into the river, and on the left or west bank, we come to Walker Dickson's house, a substantial log building 32 by 24 feet,

the timbers of good-sized spruce nicely hewn, and neatly joined at the corners. Here we notice the same perfection of garden vegetables as struck us at the Narrows; the soil is the same in every respect, and so is the timber, with the addition of spruce pine, which occurs in clumps but never in continuous belts. Dickson is about the only white man on the Water-Hen; he selected this spot, and brought his family to it from Western Canada, in the firm belief that there was no other place in the North-West so rich and so imminent in the promise of future advantage; he has been here for nearly four years, and is still 200 miles in advance of settlement. His is a much worse case than that of old Corning, the history of whose pioneering experiment in the back townships of Ontario has already been given.

We now enter Lake Winnipegosis, or rather a long arm of the lake, which, as before said, narrows into the Water-Hen River. Coasting along the west side we come to Salt Point, and encounter the same difficulty with the wind as before at the "turn." Here we notice the remains of M'Kay's salt-works. The wells are now pretty well diluted; but, on the supposition that the salt beds underlie the uniform limestone formation of this region, which, from several indications, is highly probable, the inference is reasonable that these beds are extensive, and that the manufacture of salt from the brine so easily obtained from them would be highly successful. Properly sunk wells, with a small engine to pump the brine, and a couple of wooden steam-pans to evaporate it, would be all the plant required to start the enterprise. When it is considered what a barrel of salt is worth at Edmonton on the Saskatchewan, when it costs at the very least, 8 dollars per hundred pounds to take it there from Winnipeg by Red River carts, the wonder is that no one has taken it in hand. But, of course, very little more could be done than what was attempted by the late Mr. M'Kay, until means of transport are provided. It may be asked, Why have not the Winnipegers or some other enterprising Manitobans taken up this whole question of the opening up of the Winnipegosis country, including the manufacture of salt, the mining of coal on the Saskatchewan, and the transport of it to Winnipeg, along with other enterprises of great pith and moment appertaining to the development of this great region? The answer is easy—the Winnipegers have their hands and heads full of all sorts of projects already, and are generally cold to any schemes requiring time to mature.

Rounding Salt Point we have again to wait for a south wind, which at length takes us on our way northward. Passing Ladle Island and Red Deer Point, we come to Birch Island, covering an area of 55 square miles, and said to be the best spruce timber limit on the lakes. One Whitehead, a railway contractor, purchased the lease of this island at the auction sale of the timber limits, held on the 1st of September, 1879, at Winnipeg, for the sum of 6000 dols. over the upset price of 20 dols. per square mile, which was the highest price paid for any of the nineteen limits then put up for sale. None of these limits—though, no doubt, the best this part of

the country affords—would be considered valuable in Ontario. The spruce pine, for which alone at present they are worth anything, does not show in close belts like the pine forests on the Ottawa; but is scattered among the other timber, chiefly poplar, and, at the best, is seldom more than 18 inches through. Sawn into rough planks or boards, however, it is worth 30 dols. a thousand feet at the foot of the lake; and this is found to have attraction sufficient to allure several into the business of saw-milling. A mill is already in operation at Totogan, at the south-west end of Lake Manitoba, and others are projected. To utilise the timber of this region, however, it is absolutely necessary to employ steam-tugs to haul the logs, which could be cut and rafted on the rivers before the ice broke up.

From the north-east point of Birch Island it is almost a straight course due north, forty miles or so, to Mossy Portage, between Winnipegosis and Cedar Lake on the Saskatchewan, of which this lake is merely an expansion, though a pretty extensive one, forming a sheet of water in some places wider than almost any stretch across Winnipegosis. From the north-east corner of Cedar Lake, where it narrows again into something like river dimensions, the distance to where it enters Lake Winnipeg is only about 12 miles; but in that short space it makes some curious developments—in one place expanding into a second cross lake, and having a total fall of about 60 feet, divided over five rapids—the Grand Rapids having a fall of $43\frac{1}{2}$ feet in $2\frac{1}{2}$ miles; the rest of the fall being divided over the other four. To avoid the Grand Rapids the Hudson's Bay Company have built a tramway some four miles long, at a cost of 20,000 dollars. As there are no such serious obstructions to the navigation of the Saskatchewan above Cedar Lake, it will be readily seen that if this lake were once connected with Winnipegosis, which is exactly on the same level, a new and much shorter route to the Saskatchewan would at once be established. That a canal will be cut sooner or later may be taken for granted. Mossy Portage, though it is only three miles in a straight line from lake to lake, may not be the best place to make the connection. It has been used on account of its convenient approach from Cedar Lake, where it commences at the bottom of a fine bay, having a depth of six feet at a distance of 200 feet from the shore. Southward from this shore the portage is over a corduroy road, built by the Hudson's Bay Company, and passes, first, through a swamp three-quarters of a mile in length, then over a fine high ridge, gradually rising in height till within a quarter of a mile of Winnipegosis, where it descends rather suddenly into the lake. The highest part of this ridge is about 90 feet above the lake, and it would involve serious cutting to make a canal through it; but it is said that at some other point, called Mud-Portage, the Indians can cross in their canoes at high water from one lake into the other without portaging. If such is the case, the making of a canal four feet deep would be an easy matter, and the work might all be done with a steam dredge. It may be asked why the Hudson's Bay Company have not utilised this route instead of the one by Lake

Winnipeg, with the 12 miles of difficult navigation from the mouth of the Saskatchewan to Cedar Lake. In the first place they have an established post at the head of Lake Winnipeg, which has been their head-quarters and distributing point for the Hudson's Bay country for perhaps a hundred years; it is convenient to the mouth of the Saskatchewan, and so, in a manner, they have been forced to use this old route, though it would appear that at one time they were not quite indifferent to the Winnipegosis route, as their fine steamer the Colville, which plies between Norway House and the Grand Rapids, was built for the navigation of Lake Manitoba, and it was expected she could be floated into that lake through the Fairford, or Little Saskatchewan River as it used to be called, but it was found impossible to overcome the obstructions in the bed of that river. Even if this could have been accomplished, the Colville's draft of five feet would have prevented her from ever getting up the Water-Hen. It is not at all likely that the Hudson's Bay Company, under its present auspices, will again attempt the operation of this other lake route, especially in view of its early opening up by private enterprise. The development of the Winnipegosis country would perhaps best prosper in the hands of a company, commencing on a small scale, say with one steamer on the Lakes Manitoba and Winnipegosis, one on Cedar Lake, and a third for navigating the Saskatchewan; the lake boats would not answer for the river, nor *vice versa*. No extraordinary risk would be incurred, as there would be a certainty from the start of a large influx of settlers into the country west of Winnipegosis, which could be reached by this route easier than by the railway, which if it crosses or approaches the Saskatchewan at all, must be at a point considerably west of the Swan River Valley, the Duck Mountains, or the Porcupine and Basquia Hills. We did not explore any part of this great region, but Mr. Dawson, one of our best scientific explorers, who ascended the Swan River in a canoe in 1868, thus describes the country:—

"From Winnipegosis Lake to Swan Lake the distance is about six miles. The stream which connects them is, appropriately enough, called Shoal River, which varies in breadth from 150 to 300 feet, and is very shallow, though having a swift current. About Swan Lake the country is very interesting. Numerous islands appear in the Lake. To the north, an apparently level and well-wooded country extends to the base of the Porcupine Range, while to the south the blue outline of the Duck Mountains is seen on the verge of the horizon. Ascending from Swan Lake for two miles or so, the banks of the Swan River are low. In the succeeding 10 miles they gradually become higher until they attain the height of 100 feet above the river. About 30 miles above Swan Lake, the prairie region fairly commences. There the river winds about in a fine valley, the banks of which rise to the height of from 80 to 100 feet; beyond these an apparently unbroken level extends on one side for a distance of 15 or 20 miles to the Porcupine Hills, and for an equal distance on the other side of the high table-

land called the Duck Mountains. From the south, westward to Thunder Mountain, the country is the finest ever seen in a state of nature. The prospect is bounded by the blue outline of the hills named, while in the plain, alternate wood and prairie present an appearance more pleasing than if either entirely prevailed."

The development of this rich country by means of a lake route would be a boon to the North-West, and would add immensely to the business of the Pacific Railway. There is no question as to the existence of coal in the valley of the Saskatchewan, being found in extensive veins cropping out on the banks of the river, ready to be put on barges and thus transported to the city of Winnipeg and the bare prairie country to the south. To render available this water route to the Saskatchewan, considerable outlay would be required for works at each end of the lakes, and ultimately perhaps in connecting them by a canal either at Meadow or Mossy Portage. Connection would also have to be made with the Pacific Railway by a short line from some point at the south end of Lake Manitoba, perhaps from Portage Creek which, for a certain distance, could be rendered navigable, or perhaps from the south end of Lake Francis. The works at the head of Winnipegosis to connect with Cedar Lake would be of a more formidable character, but quite within the scope of a good company's operations, even if it should be found necessary to cut through the line of Mossy Portage already described. Perhaps the most serious portion of the undertaking would be to provide shelter in that exposed part of the Lake; the same difficulty being met here as at Meadow Portage, only that the depth of water is greater, being at least six feet at a distance of 70 yards from the shore, near Mossy Portage. We hope to see an attempt made, at no distant day, to open up this new route, as there can be no question as to the great interests involved in it, and the advantage it would be to the whole North-West.

I shall not detain the reader with any account of our return trip, suffice it to say we got back safely to Oak Point, whence we dismissed one of our half-breeds, and with the other hired a smaller boat and coasted to the south end of the lake, entering Lake Francis by a narrow inlet opening from the main lake through the high sandy ridge which forms the eastern shore south of St. Laurent, as well as a good part of the southern shore. We rowed across this small lake to the opposite shore, then went south, and returned along the east shore to the north-west corner of the lake, threading our way among a bewildering maze of creeks and bays, lined every where with tall reedy grass—another sportsman's paradise. At a point as near the main lake as possible we portaged across, and so returned to Oak Point. We then hired a rig, and made our way south to the Assiniboine, near Poplar Point; whence, after waiting a day, we caught the steamer Marquette, and returned to Winnipeg, looking rather seedy, but none the worse in health and spirits.

MISCELLANEOUS NOTES AND HINTS.

EMIGRANT PARTIES.

WITHIN the last two or three years, agents have started the trade of conducting parties of emigrants from the different centres, such as Montreal, Ottawa, and Toronto, through to Emerson or Winnipeg. The trade was begun by Mr. W. R. Prittie, who at first entered into some kind of an arrangement with the Canadian Government, by which he was to receive 80 acres of land in the North-West for every immigrant brought by him into the country, and who remained as a permanent settler on the public land. Mr. Prittie commenced to advertise largely that he would conduct parties to Manitoba, and the dates of his trips were fixed for the season. In this way parties could arrange to go together, and have themselves and their baggage looked after by one who knew all the ins and outs of railway travelling. Great numbers availed themselves of this means of making the trip, and thereby avoided a good deal of trouble and annoyance. Others followed in the same line, and now there are several such agents, with any of whom it is a decided advantage to travel. Whatever the agents make out of their parties comes from the railways that take them. Mr. Prittie is the only one who claims a Government subsidy, but he is not at all sure that he will get it; nor does it seem reasonable that, because people join his parties, he should claim them as immigrants induced by him to settle in the country. If Mr. Prittie got 80 acres for every person he has accompanied to Manitoba who afterwards became a permanent settler, he would be next to the Government and the Railway Syndicate, the largest owner of real estate in the Dominion of Canada. That Mr. Prittie is entitled to some consideration at the hands of the Government for what he has done in making it easy and pleasant for emigrants, is quite evident, and we have no doubt he will be dealt with liberally.

THE ROUTES TO THE NORTH-WEST.

Mr. Prittie always takes his parties by the Great Western Railway to Detroit, thence by the Michigan Central to Chicago, thence by the Chicago, Milwaukee and St. Paul to St. Paul, thence by the St. Paul, Minneapolis and Manitoba Railway to Emerson or Winnipeg. This is an all-rail route, with close connections, by which the journey from Toronto can be made in about 65 hours. The second-class fare this last year has been a little over £5 sterling.

Another route recently established, and in every way convenient, is by Grand Trunk Railway from any eastern point right through to Chicago, thence by the Chicago, Milwaukee and St. Paul or the Chicago and North-Western to St. Paul, and thence by the only other rail route, the St. Paul, Minneapolis and Manitoba Railway to Emerson or Winnipeg.

There are two Lake routes largely patronised during the three best months—June, July and August. One is by Northern Railway from Toronto to Collingwood, thence by boat to Duluth, thence by Northern Pacific Railway to Glyndon, and thence by the St. Paul, Minneapolis and Manitoba Railway, as before. The other lake route is by Grand Trunk to Sarnia, thence by boat to Duluth, and from thence by railway, as before. The fare by the boat is lower, the trip takes a day or two longer, but it is a very pleasant one in fine weather.

IMMIGRANT GUIDES.

In addition to the advantage of being conducted on the journey to the country by one or other of the self-constituted agents already referred to, the immigrant as soon as he lands in Emerson or Winnipeg, may, on application at the emigration office at either of these points, obtain the services of an official guide, provided by the Government, who, without any charge, will conduct him to any part of the country he may wish to go to.

This system of guiding immigrants on the look-out for land, was established last year, and has been found to answer the purpose as well as could be expected. The only thing about these guides is, that you have to follow their lead wherever they go. Speaking of guides in general—not the Government guides, Professor Macoun says:—

"Now, one more for the benefit of young men, to whom I wish to do good, let me tell you something about guides. If you go West you are sure to be told, 'You need a guide. Now, a North-West guide is a gentleman who certainly knows the country—that is, just as much of it as his father before him knew. If you say, I want to go this way, you will be told there is no road. Then do as I did, just say, 'I am going without a road.' Engage a man that knows the country, but do the guiding yourself. You may be sure you will be guided aright if you show yourself the guide's master.'"

THE SEASONS IN MANITOBA.

April and May, with perhaps the first ten days of June, are the spring months. Up to the middle of May it is generally dry, the roads are good, and the prairie grass having been burnt off the previous autumn, this is the best time to travel and see the country. There are no flies, and the weather is often delicious. If the farmer has the means and uses despatch, he may get all his seeding done before the rains, which usually commence about the middle of May and continue at intervals till the end of June. The roads, if they can be called roads, are then in a dreadful state, no wonder

immigrants are discouraged, and people are so anxious to get railways. But it must be remembered that the country is yet in a state of nature, and to have good roads, they must be made. This is being done as fast as the country can afford to do it. 20,000 dollars has recently been apportioned among the various municipalities, to be expended in the construction of roads and bridges. This is independent of the appropriation for drainage purposes.

The summer extends through two-thirds of June into the middle of August. There are some very hot days, but the nights are always cool, and the almost uniform breeze of the prairie tempers the heat of noon. Sultry weather is rare, and there is no languor with all the heat. The usual run of summer weather is alternate rain and breezy hot sunshine. The winds whistle and moan as if there was to be a winter storm, and you expect a change soon, but it may be days before it comes. When it does come the breeze falls, and then we have sometimes a terrific thunder-storm, with lightning that seems to make everything blue, and wind that might almost be called a hurricane. Then the sun and the breezes begin the same play over again, but seldom lasting long enough to dry up the roads.

The autumn months are August, September, and part of October. This is a glorious season—breezy hot days and cool nights. The atmosphere is often hazy, as if charged with smoke; but the charm of the season is indescribable—it has to be felt.

The winter months are November, December, January, February, and March. The Indian summer commences early in November, and generally lasts ten days to a fortnight. It has been well named "The Summer of All Saints." The next day, perhaps, after what has been the fairest, drowsiest, and most peaceful of this lovely season, the river may be frozen over. In December we have winter in earnest. There may be one thaw in January, but usually there is a steady cold, with an occasional blizzard; but there are never more than two or three during the season. Then it is unmistakably cold, and dangerous to be out of doors, to those who are not seasoned. When the air is still and the sun bright, no matter how absolutely cold it may be, everybody is on the street and enjoying themselves. The sky is blue as steel, and there is a glitter about everything that suggests heat rather than cold. Owing to the dryness of the atmosphere a little heat goes a great way in a well-built house. Old people do not seem to dread the winter in the same way as I have known them to do in Eastern Canada. The nights are truly splendid, and never dark, except in a storm. With a full moon, a sleigh-ride on the Red River, within the shelter of the woods and high banks, is one of the rarest enjoyments.

THE MOSQUITO.—DONE FOR AT LAST.

People suffer a good deal from mosquito bites during the first year of settlement in the North-West. After that, for some reason or other, neither the bite nor the irritation that follows is felt so much. As soon as the land round the house is ploughed and cultivated, and

gauze bars or screens placed on the windows and doors, there will be perfect immunity from the flies inside. Before this can be done, the common practice is to make a "smudge,"—that is a fire of wet leaves and straw, covered up with soda, so as not to burn away too quickly, and to make as much smoke as possible. Cattle and horses will run to a smudge, and stand round it all night, when the flies are bad, as they always are in still, warm nights. A smudge inside, or at the door of the house, is a cure almost as bad as the disease. It must, therefore, be good news to multitudes of the suffering, that an effectual destroyer of the mosquito, as well as the house-fly—which is almost as great a pest—has at length been discovered in the powdered leaf of a plant that can easily be procured. The following is a full and particular account of this plant, and the way to use it:—

"The *Pyrethrum roseum*, or 'Persian camomile,' is the powdered leaf of a harmless flower, growing in Caucasian Asia in great profusion, where for centuries it has been used to rid the natives of unwelcome guests from the insect world. It can be purchased from almost any reliable druggist at about seven cents per pound, and ready prepared for use.

"With a finely-powdered dust made from these flowers the mosquito, the house-fly, the wicked flea, and the disgusting *Cimex lectularius*, may all be promptly put to flight or calmly murdered—a murder conferring on the human heart a joy too deep for words; for certainly it is a joy to sit, as I do now at my writing-table, this hot July night, watching the agonies of insects, and rarely feeling a retributive sting to warn one of their presence.

"In order to enjoy this revengeful, delicious sport, it is only necessary to heap up in a little cone one teaspoonful of the blessed drug pyrethrum, touch it with a lighted match, and watch the thin, blue line of smoke as it rises to the ceiling and is wafted through the air, changing the busy drone of insect life into a weak wail of insect woe. Pretty soon down they come plump on the table and over your paper, spin on their tiny backs, and sheath their lancets, curl up their hair-like legs, and interest one no more.

"Up stairs our little ones sleep unmolested, though there are thousands of mosquitoes in the room; the pests are sick unto death, and cling sadly to the wall, too feeble to think of tapping the rich warm blood that glows in the limbs just below; the fume of the pyrethrum has settled their business; and while it lingers in the room outsiders are unwilling to make an entry, though the windows are raised and the lattices only half closed.

"Gauze bars were long since banished from our beds; indeed, we have not used them for nearly seven years. They are hot stuffy things at best, and one must be sadly driven to attempt to sleep under such a cover; then, as we all know, the mosquito always finds his way through, no matter how carefully one may tuck up the folds under the couch.

"Smoke from the Persian camomile, or its dusty powder, we have found most efficacious, and your readers will bless me when once

they try it. The purity of the drug must be assured. This can readily be tested; it must have a bright buff colour, be light, readily burned, and give a pleasant tea-like fragrance; one pinch should kill a dozen flies confined in a bottle at once; where it fails of these properties it has been adulterated.

"In common use in large or breezy rooms, where, from large dilution it fails to kill, it nevertheless produces in insect life, through its volatilized essential oil or resin, undoubted nausea, vertigo, respiratory spasm and paralysis. It acts upon them through the minute spiracles, the breathing tubes, that stud the surface of their little bodies, and form a delicate net-work of veins in their tiny wings. To human beings, it is, as far as I can ascertain, entirely innocuous and not disagreeable. That we—a family of eight persons, infants and adults—have lived for several weeks in an atmosphere of pyrethrum, dust and smoke combined during this present summer is sufficient proof of my statement.

"To the sceptic I recommend an interesting experiment. Puff the pyrethrum into a close, warm room, where flies most love to swarm, just after dark; shut the door, and make another visit in thirty minutes. The sight of seeing millions of dead and squirming vermin on the floor will do his heart good—that is, if he is human, and not an angel.

"To remove the irritation attending the bite of the mosquito, a twenty per cent. solution of carbolic acid either in oil or water is said to be effectual; but I have always used *vaseline*, a product of coal-oil, now in general use for a great many useful purposes; it gives immediate and infallible relief. No emigrant should leave home without it. It is sold by all druggists here in one pound tins, that cost one dollar."

HOW RAILWAYS ARE BUILT ON THE PRAIRIES.

A gang of men start ahead with axes and clear away any timber, brush, or scrub that may be in the way. Another gang follows and lays down the ties or sleepers on the sod, at the right distance apart; the ties are supplied by teams that accompany the gang from different points along the line, where they are dumped off each day. Another gang then comes along in a hand-car with the rails, plates, and bolts. The rails are laid on the ties and bolted down at once. Other gangs come along and fix the rails in gauge and position. If the ground is low, the ties are underlaid with others lengthways. Then comes the gravel train, with perhaps 25 trucks loaded with ballast, which is shovelled or ploughed off on the sides; the levelling of the track then commences, and so the railway is built at the rate of half a mile or a mile a day.

CROPS ON SOD.

The following article appeared a short time ago in the *St. Paul Pioneer Press*, and gave rise to a considerable amount of inquiry

and comment in the local papers at the time. It is worth while making a note of it:—

"An experiment in raising grain on raw sod has been tried in the vicinity of Big Stone Lake for the past two years with such marked success that it is worthy of extensive trial. We are not informed who the first experimenter was, but at any rate, in the vicinity of Big Stone City there are farmers so confident of success that they have put in considerable quantities of small grain on the raw sod this last season, and in every case, so far as we could learn, with the most flattering results. The novelty of the operation is, that the grain is first sown on the prairie grass, and then the breaking is done. A not very heavy sod is turned, and the grain buried quickly finds its way through. In a few weeks the sod is as rotten as need be, and can be kicked to pieces easily with the foot. Now for an illustration.

"A Mr. Daly, near Big Stone City, sowed ten acres of oats in this way last year. He put two bushels and a peck to the acre, and broke his land. Last fall, from ten acres, he harvested 420 bushels of oats, which were worth 25 cents a bushel, and which paid for the breaking and left him 75 dollars besides. This year he sowed 75 acres in this way with equally good success, the yield, according to estimate, as he had not threshed when we were there, not being less than a thousand bushels on the piece. Another gentleman near him sowed buckwheat in the latter part of May in the same way and has every promise of a magnificent crop. Another tried corn, dropping a few kernels in every fourth furrow. Wheat has not been tried, but will in another year. It has been found that grain can be sowed on the prairie early, and the sod rotted as readily as it sowed in June, as the growing crop shades it, and but little grass starts.

"This is a valuable discovery, and will be worth much to new beginners, who, thus far, with the exception of a little sod corn and a few potatoes, have not expected anything before the second year. It will be of value also to large farmers, who are obliged to go to a heavy outlay each year for breaking, for the oat crop not only pays for the labour, but leaves a good margin besides. It is an experiment certainly worth a trial."